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Contracts Department
1220 Pacific Highway, Building 127, Room 112
San Diego, California 92132-5190

CONTRACT NO. N68711-04-D-1104
CTO No. 0010

FINAL
GROUNDWATER MONITORING REPORT
UST SITE 14131


August 21, 2006

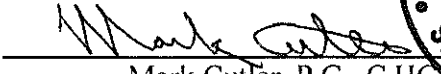
MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA

DCN: SES-TECH-06-0151

Prepared by:

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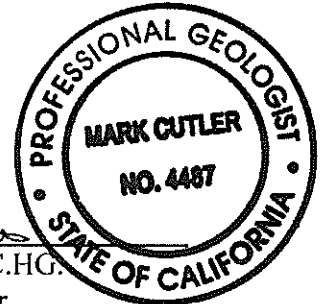


TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF TABLES	ii
LIST OF FIGURES	ii
ABBREVIATIONS AND ACRONYMS	iii
1.0 INTRODUCTION	1-1
1.1 SCOPE OF WORK	1-1
1.2 SITE IDENTIFICATION	1-2
2.0 GROUNDWATER SAMPLING	2-1
2.1 WATER LEVEL MEASUREMENTS	2-1
2.2 SAMPLING METHODOLOGY	2-1
2.3 SAMPLE ANALYSES	2-2
2.4 WASTE MANAGEMENT	2-2
3.0 GROUNDWATER MONITORING RESULTS	3-1
3.1 GROUNDWATER FLOW DIRECTION	3-1
3.2 ANALYTICAL RESULTS	3-1
4.0 QUALITY ASSURANCE AND QUALITY CONTROL	4-1
5.0 SUMMARY	5-1
6.0 REFERENCES	6-1

APPENDICES

- Appendix A Well Sampling Logs
- Appendix B Non-Hazardous Waste Manifest
- Appendix C Laboratory Analytical Report and Chain-of-Custody Form

LIST OF TABLES

Table 2-1	Summary of Groundwater Level Elevations, UST Site 14131, MCB Camp Pendleton, California
Table 3-1	Summary of Groundwater Sampling Results, UST Site 14131, MCB Camp Pendleton, California

LIST OF FIGURES

Figure 1-1	Site Vicinity Map
Figure 2-1	Groundwater Gradient and Contaminant Concentration Map, June 2006

ABBREVIATIONS AND ACRONYMS

amsl	above mean sea level
BTEX	benzene, toluene, ethylbenzene and total xylenes
CTO	Contract Task Order
DEH	Department of Environmental Health
DO	dissolved oxygen
DOT	Department of Transportation
EPA	U.S. Environmental Protection Agency
ft/ft	feet per foot
iron (II)	ferrous iron
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MCB	Marine Corps Base
NAVFAC SW	Naval Facilities Engineering Command, Southwest
ORP	oxidation/reduction potential
PAH	polynuclear aromatic hydrocarbon
RPD	relative percent difference
RWQCB	Regional Water Quality Control Board
SES-TECH	Sealaska Environmental Services LLC and Tetra Tech FW, Inc.
TPH-d	total petroleum hydrocarbons quantified as diesel
UST	Underground Storage Tank
VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board

1.0 INTRODUCTION

This Groundwater Monitoring Report, prepared by SES-TECH, a joint venture between Sealaska Environmental Services LLC and Tetra Tech FW, Inc., presents the results of groundwater sampling completed in June 2006 at Underground Storage Tank (UST) Site 14131, Marine Corps Base (MCB) Camp Pendleton, California (Figure 1-1).

UST Site 14131 is regulated under the California State Water Resources Control Board Leaking UST program as administered by the California Regional Water Quality Control Board (Water Board, formerly RWQCB), San Diego Region, and this analysis was conducted in support of efforts to achieve regulatory site closure. The document guiding the assessment, remediation, and closure process for the site is the *San Diego County Site Assessment and Mitigation Manual 2004* (San Diego County Department of Environmental Health [DEH], 2004). This groundwater sampling event is the first of four consecutive quarterly events proposed to be completed as part of the monitored natural attenuation remedial action alternative requested for the site in the Corrective Action Plan (SES-TECH, 2006). The groundwater sampling activities conducted at the site, as well as the associated reporting activities, were performed under Contract Task Order (CTO) No. 0010 for the Naval Facilities Engineering Command, Southwest (NAVFAC SW), Contract No. N68711-04-D-1104.

1.1 SCOPE OF WORK

Groundwater monitoring at UST Site 14131 includes measuring water levels and collecting and analyzing groundwater samples. During this sampling event, monitoring wells MW3, MW5, MW6, and MW7 were sampled for total petroleum hydrocarbons quantified as diesel (TPH-d), volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and natural attenuation parameters nitrate and sulfate.

1.2 SITE IDENTIFICATION

Site Address:	Building 14131, 14 Area MCB Camp Pendleton, CA 92055
Facility Name:	Battalion Headquarters
County of San Diego DEH Case No.:	H05939-266
Property Owner and Responsible Party:	United States Marine Corps
MCB Camp Pendleton Contact:	Mr. Chet Storrs, Remediation Branch Manager Assistant Chief of Staff, Environmental Security Building 22165 MCB Camp Pendleton, CA 92055-5008 (760) 725-9774
Remedial Project Manager:	Mr. Bipin Patel NAVFAC SW 1220 Pacific Highway San Diego, CA 92132-5181 (619) 532-4814

2.0 GROUNDWATER SAMPLING

The following sections summarize the June 2006 quarterly sampling event, the first of four consecutive events to be completed at UST Site 14131.

2.1 WATER LEVEL MEASUREMENTS

As part of the groundwater sampling event, the depth to water and the total depth of each well were measured from the top of the well casing and recorded on a well sampling log (Appendix A). Table 2-1 provides a summary of the groundwater elevation data. Since the well screen in MW2 was installed relatively deep (between 32 and 47 feet below ground surface), groundwater was above the top of the screen in this well.

A groundwater elevation contour map was prepared based on the most recently recorded water levels (Figure 2-1).

2.2 SAMPLING METHODOLOGY

On June 21, 2006, four of the five monitoring wells on site (MW3, MW5, MW6, and MW7) were sampled using low-flow sampling methodology. Well MW2 was not sampled because the well screen was installed deep and groundwater was over 20 feet above the top of the screen. Before sampling, a bladder pump was slowly lowered into each well and positioned approximately 2 feet below the surface of the groundwater table. In addition, a water-level indicator was placed at the water surface to monitor water-level drawdown during purging. While purging at the lowest operational setting of the pump, which was approximately 100 milliliters per minute, the water level surface exceeded the maximum drawdown limit of 0.33 feet at wells MW5 and MW7.

Because a stabilized water level could not be achieved, even at very low purging rates, a passive, or minimum purge, sampling method was performed following the methodology presented in a U.S. Environmental Protection Agency (EPA) Groundwater Issue paper titled *Low Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (Puls and Barcelona, 1996). The passive/minimal purge approach requires the removal of a minimum of three volumes of the sampling system from each well. The liquid volume of the sampling system consists of the volume of the pump's bladder, discharge tubing and flow through cell attached to the water quality meter. After purging the required volume at the lowest flow rate achievable for each well, a groundwater sample was collected.

To monitor groundwater conditions during purging, water-quality parameters were measured as follows: temperature, pH, electrical conductivity, turbidity, dissolved oxygen (DO), and oxidation/reduction potential (ORP). These measurements were recorded on the well sampling logs provided in Appendix A. After purging the required volume at the lowest flow rate

achievable for each well, a groundwater sample was collected. Groundwater samples were collected through new disposable polyethylene discharge tubing, which was connected to the bladder pump. Each sample was collected in the appropriate containers, labeled, and placed in a cooler with ice immediately after sample collection for delivery to the analytical laboratory.

All non-disposable down-hole equipment, such as the bladder pump and water-level indicator, were decontaminated before sampling each well.

2.3 SAMPLE ANALYSES

Groundwater samples were delivered by courier to EMAX Laboratories in Torrance, California, for analysis of TPH-d using EPA Method 8015B, VOCs using EPA Method 8260B, and PAHs using EPA Method 8270C. To continue evaluating the site for potential natural attenuation of groundwater, samples were analyzed for nitrate and sulfate by EPA Method 300.0. On-site analysis for ferrous iron [iron (II)] was completed using a Hach IR-18C field kit and documented for each well on the well sampling forms (Appendix A).

2.4 WASTE MANAGEMENT

All equipment decontamination water and groundwater generated from well purging were temporarily contained in Department of Transportation (DOT)-approved drums and stored on site. The drums were closed, marked, labeled, and located to minimize traffic hazards and discourage tampering. The wastewater drums were transported off site for disposal at a waste-permitted facility. The handling, management, transportation, and disposal of wastewater were conducted in accordance with state and federal laws and regulations. No wastes were stored at the site for more than 60 days. A copy of the waste manifest is provided in Appendix B.

3.0 GROUNDWATER MONITORING RESULTS

Groundwater flow and analytical results from the June 2006 sampling event are discussed in the following subsections.

3.1 GROUNDWATER FLOW DIRECTION

Groundwater elevations measured during the June 2006 event are presented in Table 2-1.

As shown on Figure 2-1, groundwater elevations at the site ranged from 284.25 feet above mean sea level (amsl) at MW2 to 288.26 feet amsl at MW7. The water level at MW2 was approximately 21.56 feet above the screened interval of the well; however, depths to water in MW3, MW5, MW6, and MW7 were all within the screened intervals of the wells.

Based on water levels measured for the June 2006 event, groundwater flows generally eastward (see Figure 2-1) with an approximate gradient of 0.048 feet per foot (ft/ft).

3.2 ANALYTICAL RESULTS

A total of four samples (plus a field duplicate, a trip blank, and an equipment rinsate sample) were collected during the June 2006 event and sent to EMAX Laboratories for analysis. A summary of groundwater sampling results is presented in Table 3-1 and further summarized on Figure 2-1.

TPH-d was detected in sample 10-14131-005, collected from MW7, and sample 10-14131-006, a duplicate sample from MW7. The reported concentrations of TPH-d were 0.95 and 1.0 milligrams per liter, respectively. Acetone, bromodichloromethane, chloroform, and dibromochloromethane were each detected in sample 10-14131-005 at estimated concentrations less than the reporting limits (J-flag). The duplicate sample, sample 10-14131-006, had detections of bromodichloromethane, chloroform, chloromethane, and dibromochloromethane, also at estimated concentrations below reporting limits (J-flag). Bromodichloromethane, chloroform, and dibromochloromethane are trihalomethanes, which are common byproducts of the dechlorination process for drinking water. Because MW7 is a new well, the tap water used to hydrate the bentonite seal is possibly a source of these analytes around this well. Other targeted VOCs, including benzene, toluene, ethylbenzene, and total xylenes (BTEX), were not detected in any of the wells. In addition, PAHs were not detected in any of the four monitoring wells.

As discussed in Section 2.3, samples from all wells were also analyzed for parameters to be used for evaluation of natural attenuation of groundwater. Laboratory analyses for nitrate and sulfate, field analyses for iron (II), and field measurements of DO and ORP were performed. These analytical results and field measurements are summarized in Table 3-1. Purging and sampling

data sheets with the recorded ORP and DO readings and iron (II) results for each well are provided in Appendix A.

The analytical results were successfully uploaded to the Water Board Geotracker database (Confirmation No. 8007905662). A copy of the laboratory analytical report and the chain-of-custody form is provided in Appendix C.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

This section summarizes the quality assurance and quality control results for the June 2006 groundwater sampling event.

All groundwater samples were collected and preserved in accordance with the *San Diego County Site Assessment and Mitigation Manual 2004* (DEH, 2004) and were delivered to the analytical laboratory within 24 hours of sample collection by a laboratory courier and analyzed within the method-specified analytical holding times. EMAX Laboratories, a state of California-certified and Naval Facilities Engineering Service Center-evaluated laboratory, performed the sample analyses.

One field duplicate (identified as 10-14131-006) was collected from monitoring well MW7. The relative percent difference (RPD) between the samples was 5 percent for TPH-d, 6 percent for bromodichloromethane, 2 percent for chloroform, and 10 percent for dibromochloromethane. The RPD for all other analytes could not be determined because other target analytes were not detected in either one or both of the samples collected from monitoring well MW7.

To assess potential cross-contamination of analytes during sample transport, a trip blank sample (identified as 10-14131-001) was sent with groundwater samples to the laboratory and analyzed for VOCs. Detectable levels of VOCs were not reported above the project reporting limits in the trip blank sample.

One equipment rinsate sample was also collected (identified as 10-14131-007) and analyzed for TPH-d, VOCs, and PAHs. A low concentration of chloroform was detected below laboratory reporting limits (J-flag). Given that no detections of chloroform were found above reporting limits in the collected samples, this chloroform detection is most likely a result of a laboratory artifact or contaminant. Detectable levels of TPH-d and other VOCs were not reported in the equipment rinsate sample, indicating the effectiveness of the decontamination procedure.

Method blanks, surrogate spikes, laboratory control samples (LCSs), and LCS duplicates (LCSDs) were analyzed to assess method accuracy and precision in accordance with the analytical method specifications. A set of matrix spike and matrix spike duplicate samples (10-14131-004) was provided to the laboratory during this sampling event. No detectable levels of TPH-d, VOCs, or PAHs were found in the method blanks. Percent recoveries in LCS, LCSD, and surrogates were well within the project-specified quality control acceptance limits. With the exception of naphthalene, which had an RPD of 36 percent, RPDs between the spiked duplicates were all within acceptance limits.

5.0 SUMMARY

Based on water levels measured for the June 2006 event, groundwater flows generally eastward (see Figure 2-1) with an approximate gradient of 0.048 ft/ft. Groundwater elevations at the site ranged from 284.25 feet amsl at MW2 to 288.26 feet amsl at MW7. The water level in MW2 was significantly above the screened interval of the well (over 20 feet), and MW2 was not sampled. The depths to water in the other four wells were within the screened intervals.

During the June 2006 event, TPH-d was detected in both samples collected from MW7. The J-flag (estimated) concentrations of acetone, bromodichloromethane, chloroform, chloromethane, and dibromochloromethane detected at MW7 were not above reporting limits. PAHs and other VOCs, including BTEX, were not detected in any of the wells.

This sampling event was the first of four consecutive quarterly events undertaken in order to support a case for site closure. SES-TECH will continue to execute this sampling scheme and make a recommendation concerning further corrective action, if appropriate, upon its completion.

6.0 REFERENCES

- Puls R. and M.J. Barcelona. 1996. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*. April.
- San Diego County Department of Environmental Health, Land and Water Quality Division (DEH). 2004. *San Diego County Site Assessment and Mitigation Manual 2004*.
- SES-TECH, 2006. *Final Corrective Action Plan for UST Site 14131, MCB Camp Pendleton*. May.

TABLES

TABLE 2-1

**SUMMARY OF GROUNDWATER ELEVATIONS
UST SITE 14131, MCB CAMP PENDLETON, CALIFORNIA**

Monitoring Well ID	Well Screen Interval (feet btoc)	Reference Point (toc) Elevation (feet amsl)	Date Measured	Depth to Water (feet btoc)	Groundwater Elevation (feet amsl)
MW2	32 – 47	294.69	3/24/92	9.64	285.05
			4/17/92	9.18	285.51
			6/19/06	10.44	284.25
MW3	8 – 23	297.17	3/24/92	8.47	288.70
			4/17/92	8.54	288.63
			3/16/06	9.23	287.94
			6/19/06	9.32	287.85
MW5	5 – 15	295.08	12/2/98	9.43	285.65
			3/16/06	6.77	288.31
			6/19/06	8.38	286.70
MW6	5 – 15	294.74	12/2/98	5.12	289.62
			3/16/06	5.87	288.87
			6/19/06	7.95	286.79
MW7 ⁽¹⁾	5 – 15	295.99	6/19/06	7.73	288.26

Notes:

⁽¹⁾ - Well installed after March 2006 sampling event

amsl - above mean sea level

btoc - below top of casing

MCB - Marine Corps Base

toc - top of casing

UST - Underground Storage Tank

TABLE 3-1
SUMMARY OF GROUNDWATER SAMPLING RESULTS
UST SITE 14131, MCB CAMP PENDELTON, CALIFORNIA

Well ID	Date Sampled	Sample ID	TPH-d mg/L	VOCs (µg/L)										PAHs (µg/L)								Natural Attenuation Parameters					
				Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Acetone	Bromodichloromethane	Chloroform	Dibromochloromethane	Chloromethane	Acenaphthene	Anthracene	Benzo[a]anthracene	Chrysene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Nitrate-N mg/L	Sulfate mg/L	Iron (II) mg/L	Dissolved Oxygen mg/L	ORP mV	
1992 Initial Site Investigation																											
MW1	03/24/92	MW14131-1	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/17/92		ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW2	03/24/92	MW14131-2	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/17/92		ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW3	03/24/92	MW14131-3	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/17/92		ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1998 Site Investigation																											
MW4	12/02/98	MW14131-4	6.3	0.7J	ND	1.0J	1.3J	ND	41J	NA	ND	NA	NA	5.0J	0.5	0.4	0.1J	8.3	23	0.2J	0.75	--	--	--	--	--	
MW5	12/02/98	MW14131-5	ND	ND	ND	ND	ND	ND	31J	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
MW6	12/02/98	MW14131-6	ND	ND	ND	ND	ND	3J	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
Post UST Soil Cavity Excavation Groundwater Sampling Events																											
MW3	03/16/06	0004-136	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	06/21/06	10-14131-002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.8	1460	0.0	1.56	138	
MW5	03/16/06	0004-135	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	06/21/06	10-14131-003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19	131	0.0	1.56	100	
MW6	03/16/06	0004-137	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
		0004-138 (Dup)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	06/21/06	10-14131-004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.67	81.2	0.0	0.86	82	
MW7	06/21/06	10-14131-005	0.95	ND	ND	ND	ND	ND	7.2J	0.48J	0.61J	0.29J	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	241	0.0	1.20	99	
		10-14131-006 (Dup)	1.0	ND	ND	ND	ND	ND	ND	0.51J	0.62J	0.32J	0.23J	ND	ND	ND	ND	ND	ND	ND	ND	6.8	240	--	--	--	
Water Quality Objectives			0.1 ⁽¹⁾	1	150	680	1750	13	⁽²⁾	100 ⁽³⁾	100 ⁽³⁾	100 ⁽³⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	0.2 ⁽⁴⁾	⁽²⁾	⁽²⁾	1	⁽²⁾	10	500 ⁽¹⁾	⁽²⁾	⁽²⁾	⁽²⁾	

Notes:

- ⁽¹⁾ - Secondary taste and odor objective
- ⁽²⁾ - No established water quality objective
- ⁽³⁾ - Total trihalomethanes
- ⁽⁴⁾ - Proposed primary MCL
- - Not analyzed
- µg/L - micrograms per liter
- Dup - duplicate sample
- iron (II) - ferrous iron
- J - estimated value
- MCB - Marine Corps Base
- mg/L - milligrams per liter
- MTBE - methyl tert-butyl ether
- NA - not available
- ND - not detected above project reporting limits
- ORP - oxidation/reduction potential
- PAH - polynuclear aromatic hydrocarbon
- TPH-d - total petroleum hydrocarbons quantified as diesel
- UST - Underground Storage Tank
- VOC - volatile organic compound

FIGURES

DRAWN BY: MD	CHECKED BY: MC	APPROVED BY: MC	DCN: SES-TECH-06-0151	DRAWING NO: 06015111.DWG
DATE: 08/09/06	REV: REVISION 0		CTO: #0010	

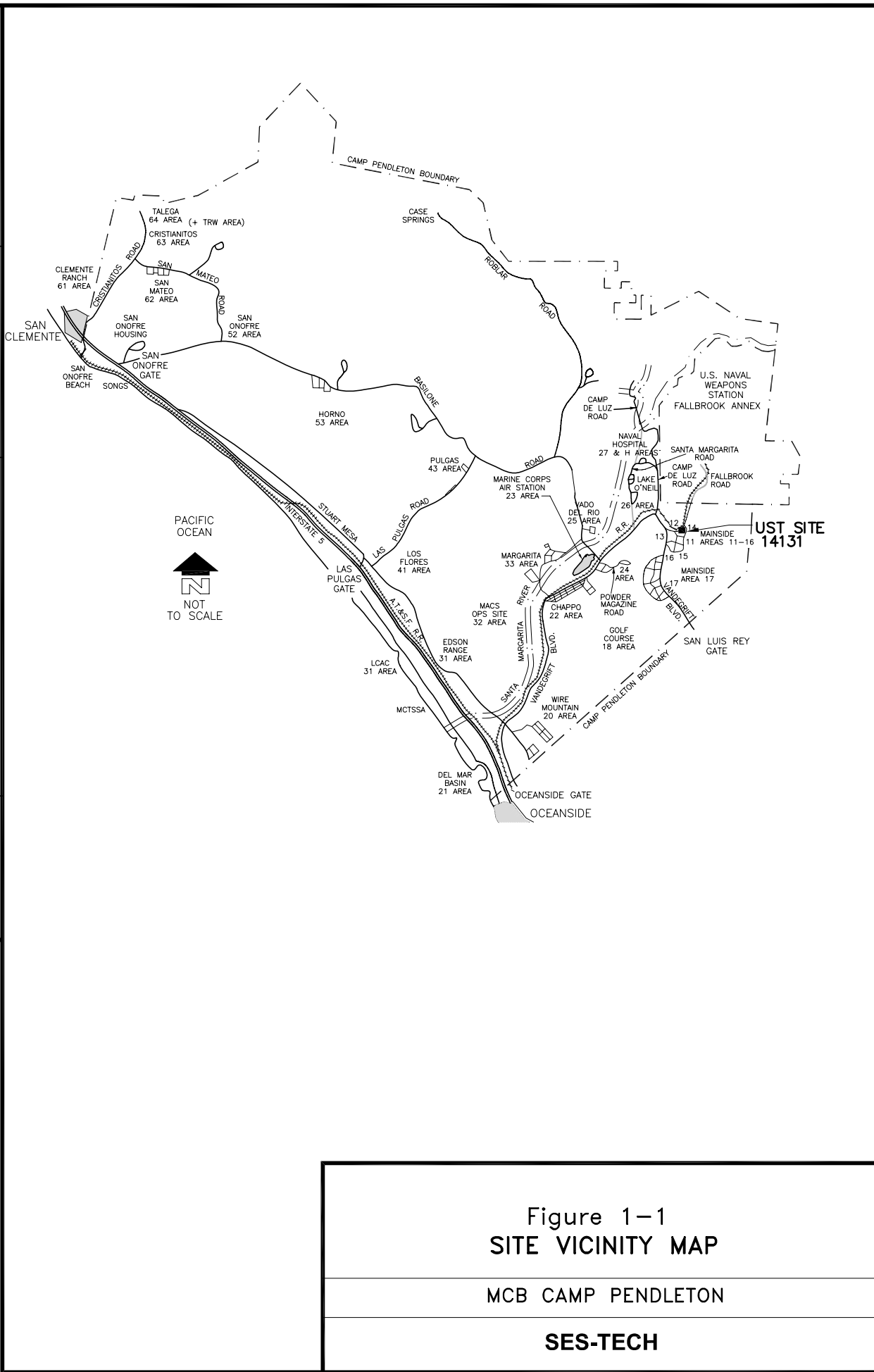
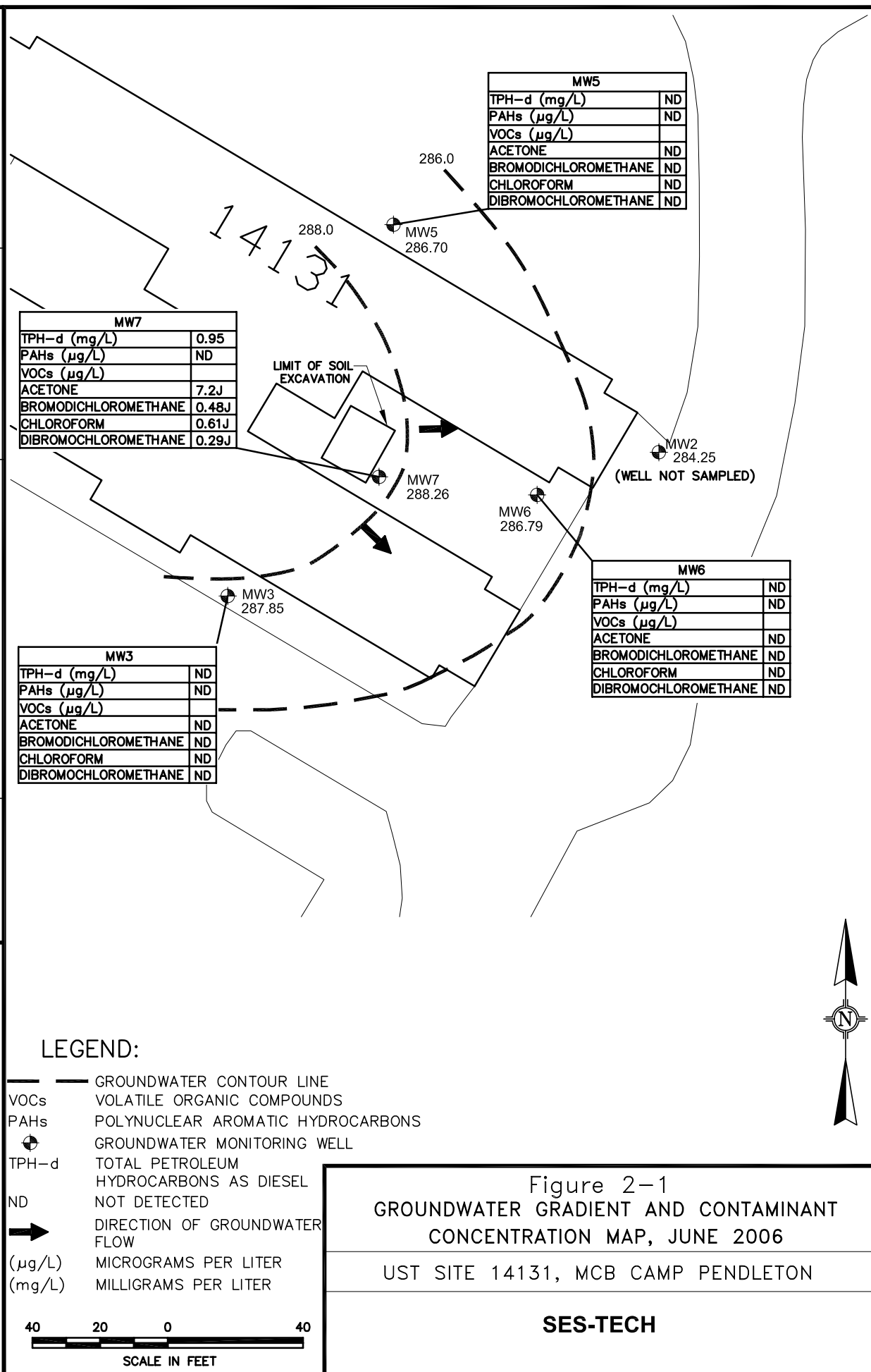


Figure 1-1
SITE VICINITY MAP
 MCB CAMP PENDLETON
SES-TECH

DRAWN BY: MD	CHECKED BY: MC	APPROVED BY: MC	DCN: SES-TECH-06-0151	DRAWING NO: 06015121.DWG
DATE: 08/09/06	REV: REVISION 0		CTO: #0010	



APPENDIX A

WELL SAMPLING LOGS

Date: 6/19/04 Project Name: UST Site 14131
 Personnel: W. Bryant, J. Seiger Project OFS: 2973
J. Bartlett Measurement Device: Solinst
 Weather: Hot, Sunny Comments: _____

[illegible]

Project Name:	Camp Pendleton/14131	Well Number:	MW\$3 w/o 6/21/06
Project Number:	2973.6010	Equipment:	Horiba U22
Date:	6/21/06	Sample ID:	10-14131-002 Time: 0934
Site Engineer(s):	WS, JB	Contractor:	None

Total Volume Purged (mL): 1500

9.25	9.48
------	------

~~4.28~~ 22.76

25

10

11

160 mL/min

100mL/min

470 mL = Bladder volume + Flowthru cell volume

Hach Fe^{2+} 0.0

Revised Low-flow log (CPEN) SES-TECH

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton / 14131
 Project Number: 2973.0100
 Date: 6/21/06
 Site Engineer(s): WB, JB

Well Number: MW5
 Equipment: Horiba U-10
 Sample ID: 10-14131-003 Time: 1124
 Contractor: None

Reference: Top of Casing

Before

After

Total Volume Purged (mL): 1800

Depth to Water (ft)

8.40 8.80

Depth of Well (ft)

14.28

Depth to Top of Screen (ft)

5'

Screen Length (ft)

10'

Pump Depth (ft)

≈ 10'

Pump Rate

100 mL/min

Sample Pump Rate

100 mL/min

System Volume (mL)

496.4

$$496.4 = 2.4 \times 11.0 + 470$$

$$\text{System Volume (mL)} = (2.4 \times H) + 470$$

where

2.4 mL/ft = tubing volume per foot (1/8" I.D.)

H = length of tubing in feet

470 mL = Bladder volume + Flowthru cell volume

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1100									Pump on
1103	7.89	1590	4.56	22.32	119	53.8	8.56	300	Clear, no odor
1106	7.45	1170	1.73	21.13	113	56.5	8.61	600	"
1109	7.41	1150	1.52	21.70	105	57.9	8.72	900	"
1112	7.42	1150	1.55	22.10	102	48.4	8.76	1200	"
1115	7.44	1180	1.54	22.65	101	48.6	8.78	1500	"
1118	7.43	1170	1.56	22.41	100	46.2	8.80	1800	"
1121									Stop
1124									Collected Sample
<div>CEG JSR</div>									
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton
 Project Number: 2973.0100
 Date: 6/21/06
 Site Engineer(s): WB, JB

Well Number: MW06
 Equipment: Horiba U-22
 Sample ID: 10-14131-004 Time: 1307
 Contractor: None

Reference: Top of Casing	Before	After	Total Volume Purged (mL): <u>1800</u>
Depth to Water (ft)	<u>8.40</u>	<u>8.64</u>	System Volume (mL) = (2.4*H)+470 where 2.4mL/ft = tubing volume per foot (1/8" I.D.) H = length of tubing in feet 470 mL = Bladder volume + Flowthru cell volume
Depth of Well (ft)	<u>14.65</u>		
Depth to Top of Screen (ft)	<u>25'</u>		
Screen Length (ft)	<u>10'</u>		
Pump Depth (ft)	<u>10.5'</u>		
Pump Rate	<u>100^{gpm}</u>		
Sample Pump Rate	<u>100^{mL/min}</u>		
System Volume (mL)	<u>—</u>		

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1243	—	—	—	—	—	—	—	—	Pump on
1246	7.59	738	3.62	22.48	85	0.0	8.46	300	clear, no odor
1249	7.57	735	1.05	22.36	86	0.0	8.50	600	" "
1252	7.58	739	1.08	22.50	85	0.0	8.55	900	" "
1255	7.58	732	0.96	22.29	83	0.0	8.56	1200	" "
1258	7.59	736	0.88	22.34	82	1.2	8.60	1500	" "
1301	7.59	736	0.86	22.35	82	0.0	8.64	1800	" "
1304	—	—	—	—	—	—	—	—	stable
1307	—	—	—	—	—	—	—	—	Collected
Stability:	± 0.2 units	± 5%	± 0.2 mg/L	± 3%	± 20 mV	± 10%			

Hach Fe²⁺ 0.0 Includes MS/MSD

Samples were collected directly from pump unless otherwise noted.

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton / 14131 Well Number: MW7
 Project Number: 2973.0010 Equipment: Horiba U-22
 Date: 6/21/06 Sample ID: 10-14131-005 Time: 1448
 Site Engineer(s): WR3, UB Contractor: 10-14131-006 1453

Reference: Top of Casing	Before	After	Total Volume Purged (mL): <u>1800</u>
Depth to Water (ft)	<u>7.62</u>	<u>8.00</u>	$492.8 = (2.4 \times 9.5) + 470$
Depth of Well (ft)	<u>14.86</u>		System Volume (mL) = $(2.4 \times H) + 470$
Depth to Top of Screen (ft)	<u>~5.0</u>		where
Screen Length (ft)	<u>10'</u>		2.4 mL/ft = tubing volume per foot (1/8" I.D.)
Pump Depth (ft)	<u>9.5</u>		H = length of tubing in feet
Pump Rate	<u>100 mL/min</u>		470 mL = Bladder volume + Flowthru cell volume
Sample Pump Rate	<u>100 mL/min</u>		
System Volume (mL)	<u>493</u>		

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1423	—	—	—	—	—	—	—	—	Pump on
1427	7.38	3310	3.44	22.66	106	98.5	7.68	300	Clear, no odor
1430	7.35	3310	2.37	22.73	105	100.0	7.74	600	"
1433	7.37	3330	1.81	22.58	106	104.0	7.85	900	"
1436	7.38	3180	1.28	22.55	103	27.7	7.87	1200	"
1439	7.44	3080	1.24	22.58	101	0.0	7.90	1500	"
1442	7.45	3020	1.20	22.57	99	0.0	8.00	1800	"
1445	—	—	—	—	—	—	—	—	Stable
1448	—	—	—	—	—	—	—	—	Collected sample
1453	—	—	—	—	—	—	—	—	collected Dup
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

Hach Fe²⁺ 0.0

Samples were collected directly from pump unless otherwise noted.

APPENDIX B

NON-HAZARDOUS WASTE MANIFEST

NON-HAZARDOUS WASTE MANIFEST

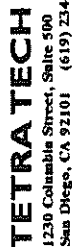
Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA 2170023533		Manifest Document No. 63002		2. Page 1 of 1	
3. Generator's Name and Mailing Address AC/S Environmental Security P.O. Box 555008 Camp Pendleton, CA 92055-5008							
4. Generator's Phone (760-725-4321) Attn: Nate Delaston							
5. Transporter 1 Company Name General Environmental Mgmt Inc.		6. US EPA ID Number CAD983649880		A. State Transporter's ID			
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone 800-326-1011			
				C. State Transporter's ID			
				D. Transporter 2 Phone			
9. Designated Facility Name and Site Address U.S. Ecology Corp. Highway 95 - 12 miles south of Beatty Beatty, NV 89003		10. US EPA ID Number NVT330010000		E. State Facility's ID			
				F. Facility's Phone 800 239 3943			
11. WASTE DESCRIPTION				12. Containers		13. Total Quantity	
				No. Type		Unit Wt./Vol.	
a. Non hazardous liquid (Well Water)				004 DM		00440 00495	
b.						002 113106	
c.							
d.							
G. Additional Descriptions for Materials Listed Above 11a) x55g Well Water-Approval				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information Emergency Phone: (800) 326-1011 (GEM) Site: US Marine Corps-Camp Pendleton-Bldg#22165 Assistant Chief, Camp Pendleton, CA 92055 Berm Equip. Decont water. 16144, 2389, 14121, (14131) 14137, 43402 SWO #164547							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations. Wendy Bryant TEEC INC 07/13/06							
Printed/Typed Name Wendy Bryant				Signature <i>[Signature]</i>		Date 07/13/06	
17. Transporter 1 Acknowledgement of Receipt of Materials 11/13/06				Date			
Printed/Typed Name Randy Negrete				Signature <i>[Signature]</i>		Date 07/13/06	
18. Transporter 2 Acknowledgement of Receipt of Materials				Date			
Printed/Typed Name				Signature		Date	
19. Discrepancy Indication Space							
20. Facility Owner or Operator, Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name				Signature		Date	

NON-HAZARDOUS WASTE

APPENDIX C

**LABORATORY ANALYTICAL REPORT
AND CHAIN-OF-CUSTODY FORM**



NUMBER 20020

CHAIN-OF-CUSTODY RECORD

[illegible]

TABLE OF CONTENTS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
SDG: 06F248

SECTION	PAGE
Cover Letter, COC/Sample Receipt Form	1000 – 1004
GC/MS-VOA METHOD 5030B/8260B	2000 – 2124
GC/MS-SVOA METHOD 3520C/8270C SIM	3000 – 3091
GC-VOA **	4000 –
GC-SVOA METHOD 3520C/8015B	5000 – 5044
HPLC **	6000 –
METALS **	7000 –
WET METHOD 300.0	8000 – 8067
OTHERS **	9000 –

** - Not Requested



LABORATORIES, INC.

1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

LABORATORY, INC.

Date: 07-07-2006
EMAX Batch No.: 06F248

Attn: Nick Weinberger

SES-TECH
1940 E. Deere Avenue, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: Camp Pendleton, UST Site 14131

Enclosed is the Laboratory report for samples received on 06/22/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
10-14131-001	F248-01	06/21/06	WATER	VOLATILE ORGANICS BY GC/MS
10-14131-002	F248-02	06/21/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14131-003	F248-03	06/21/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14131-004	F248-04	06/21/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14131-004MS	F248-04M	06/21/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14131-004MSD	F248-04S	06/21/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL

Sample ID	Control #	Col Date	Matrix	Analysis
10-14131-005	F248-05	06/21/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14131-006	F248-06	06/21/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14131-007	F248-07	06/21/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL

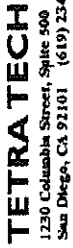
The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

K Y Pang

Kam Y. Pang, Ph.D.
Laboratory Director



1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 20020

06F248

PROJECT NAME		PURCHASE ORDER NO		ANALYSES REQUIRED		LABORATORY NAME	
PROJECT LOCATION		PROJECT NO		LABORATORY ID (FOR LABORATORY)		COMMENT	
SAMPLER NAME		AIRBILL NUMBER		LABORATORY ID (FOR LABORATORY)		COMMENT	
PROJECT CONTACT		PROJECT CONTACT PHONE NUMBER		LABORATORY ID (FOR LABORATORY)		COMMENT	
SAMPLE ID		DATE COLLECTED		TIME COLLECTED		NO OF CONTAINER	
LEVEL		T Y P E		T A T			
3 4							
10-14131-001	6/21/06	0940	3	X	10 Day		
10-14131-002	6/21/06	0754	6	X	10 Day		
10-14131-003	6/21/06	1124	6	X	10 Day		
10-14131-004	6/21/06	1307	16	X	10 Day		
10-14131-005	6/21/06	1448	6	X	10 Day		
10-14131-006	6/21/06	1453	6	X	10 Day		
10-14131-007	6/21/06	1530	5	X	10 Day		
LABORATORY INSTRUCTIONS/COMMENTS							
COMPOSITE DESCRIPTION							
SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)							
TEMPERATURE: 3.5°C SAMPLE CONDITION: <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN							
COOLER SEAL: <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN							

Type of Delivery	Delivered By/Airbill	ECN	06F248
<input checked="" type="checkbox"/> EMAX Courier	see we	Receipient	J Luna
<input type="checkbox"/> Client Delivery		Date	6-22-06
<input type="checkbox"/> Third Party		Time	1633

COC Inspection		
<input checked="" type="checkbox"/> Client Name	<input checked="" type="checkbox"/> Sampler Name	<input checked="" type="checkbox"/> Sampling Date/Time/Location
<input checked="" type="checkbox"/> Address	<input checked="" type="checkbox"/> Courier Signature/Date/Time	<input checked="" type="checkbox"/> Analysis Required
<input checked="" type="checkbox"/> Client PM/FC	<input checked="" type="checkbox"/> TAT	<input checked="" type="checkbox"/> Matrix
<input checked="" type="checkbox"/> Tel #/Fax #	<input checked="" type="checkbox"/> Sample ID	<input type="checkbox"/> Preservative (if any)
Safety Issues	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Superfund Site Samples
Comments:	<input type="checkbox"/> High Concentrations expected	
	<input type="checkbox"/> Rad Screening Required	

Packaging Inspection			
Container	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/>
Condition	<input type="checkbox"/> Custody Seal	<input checked="" type="checkbox"/> Intact	<input type="checkbox"/> Damaged
Packaging	<input type="checkbox"/> Bubble Pack	<input type="checkbox"/> Styrofoam	<input checked="" type="checkbox"/> Sufficient
Temperatures	<input checked="" type="checkbox"/> Cooler 1 <u>3.3</u>	<input checked="" type="checkbox"/> Cooler 2 <u>3.8</u>	<input checked="" type="checkbox"/> <u>plastic bag</u>
	<input type="checkbox"/> Cooler 5 _____	<input type="checkbox"/> Cooler 6 _____	<input type="checkbox"/> Cooler 3 _____
	<input type="checkbox"/> Cooler 9 _____	<input type="checkbox"/> Cooler 10 _____	<input type="checkbox"/> Cooler 7 _____
			<input type="checkbox"/> Cooler 11 _____
			<input type="checkbox"/> Cooler 12 _____
Comments:			

[illegible]

LSCID Lab Sample Container ID

REVIEWS

Sample Labeling

Date _____

SRF

Date _____

PM

Date _____

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14131

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 06F248

CASE NARRATIVE

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
SDG: 06F248

METHOD 5030B/8260B VOLATILE ORGANICS BY GC/MS

Seven (7) water samples were received on 06/22/06 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd edition.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at half of the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limits.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

Sample F248-04 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14131
SDG NO. : 06F248
Instrument ID : T-001

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	WATER		Extraction Date/Time	Sample Data FN	Calibration Prep.		Notes
				Analysis Date/Time				Data FN	Batch	
MBLK1W	V001F47Q	1	NA	06/24/0614:22		06/24/0614:22	RFV605	REV408	V001F47	Method Blank
LCS1W	V001F47L	1	NA	06/24/0612:27		06/24/0612:27	RFV602	REV408	V001F47	Lab Control Sample (LCS)
LCD1W	V001F47C	1	NA	06/24/0613:05		06/24/0613:05	RFV603	REV408	V001F47	LCS Duplicate
10-14131-001	F248-01	1	NA	06/24/0615:01		06/24/0615:01	RFV606	REV408	V001F47	Field Sample
10-14131-002	F248-02	1	NA	06/24/0615:39		06/24/0615:39	RFV607	REV408	V001F47	Field Sample
10-14131-003	F248-03	1	NA	06/24/0616:17		06/24/0616:17	RFV608	REV408	V001F47	Field Sample
10-14131-005	F248-05	1	NA	06/24/0616:55		06/24/0616:55	RFV609	REV408	V001F47	Field Sample
10-14131-006	F248-06	1	NA	06/24/0617:34		06/24/0617:34	RFV610	REV408	V001F47	Field Sample
10-14131-007	F248-07	1	NA	06/24/0618:12		06/24/0618:12	RFV611	REV408	V001F47	Field Sample
10-14131-004	F248-04	1	NA	06/24/0619:29		06/24/0619:29	RFV613	REV408	V001F47	Field Sample
10-14131-004MS	F248-04M	1	NA	06/24/0620:07		06/24/0620:07	RFV614	REV408	V001F47	Matrix Spike Sample (MS)
10-14131-004MSD	F248-04S	1	NA	06/24/0620:45		06/24/0620:45	RFV615	REV408	V001F47	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

```

=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/24/06 15:01
Sample ID: 10-14131-001                   Date Analyzed: 06/24/06 15:01
Lab File ID: RFV606                       Dilution Factor: 1
Ext Btch ID: V001F47                     Matrix       : WATER
Calib. Ref.: REV408                      % Moisture    : NA
Instrument ID : T-001
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLORO BENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
1,3-DICHLOROPROPENE	ND	.5	.2
BROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	65-135
TOLUENE-D8	102	75-125
BROMOFLUOROBENZENE	105	75-125

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 > 9. : Diluted out

Client : SES-TECH Date Collected: 06/21/06
Project : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No. : 06F248 Date Extracted: 06/24/06 15:39
Sample ID: 10-14131-002 Date Analyzed: 06/24/06 15:39
Lab Samp ID: F248-02 Dilution Factor: 1
Lab File ID: RFV607 Matrix : WATER
Ext Batch ID: V001F47 % Moisture : NA
Calib. Ref.: REV408 Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
1,3-DICHLOROPROPENE	ND	.5	.2
BROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-04	103	65-135
TOLUENE-08	99	75-125
BROMOFLUOROBENZENE	100	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
Q : Diluted out

```

=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/24/06 16:17
Batch ID:   ID: 10-14131-003               Date Analyzed: 06/24/06 16:17
Lab Samp ID: F248-03                       Dilution Factor: 1
Lab File ID: RFV608                        Matrix       : WATER
Ext Btch ID: V001F47                       % Moisture    : NA
Calib. Ref.: REV408                        Instrument ID : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
BROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	65-135
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	100	75-125

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 O : Diluted out

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=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Report No.  : 06F248                       Date Extracted: 06/24/06 19:29
Sample ID   : 10-14131-004                 Date Analyzed: 06/24/06 19:29
Lab Samp ID : F248-04                      Dilution Factor: 1
Lab File ID : RFV613                      Matrix          : WATER
Ext Btch ID : V001F47                     % Moisture      : NA
Calib. Ref. : REV408                     Instrument ID   : T-001
=====

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PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
1,3-DICHLOROPROPENE	ND	.5	.2
OMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE-CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	65-135
TOLUENE-D8	94	75-125
BROMOFLUOROBENZENE	96	75-125

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 . : Diluted out

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=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/24/06 16:55
Sample ID: 10-14131-005                   Date Analyzed: 06/24/06 16:55
Camp ID: F248-05                          Dilution Factor: 1
Lab File ID: RFV609                       Matrix : WATER
Ext Btch ID: V001F47                     % Moisture : NA
Calib. Ref.: REV408                      Instrument ID : T-001
=====

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PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	7.2J	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	.48J	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.61J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	.29J	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
ETHYLENE CHLORIDE	ND	5	.5
ETHYLENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	65-135
TOLUENE-D8	96	75-125
BROMOFLUOROBENZENE	96	75-125

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

=====
Client : SES-TECH Date Collected: 06/21/06
Project : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No. : 06F248 Date Extracted: 06/24/06 17:34
Sample ID: 10-14131-006 Date Analyzed: 06/24/06 17:34
Lab Samp ID: F248-06 Dilution Factor: 1
Lab File ID: RFV610 Matrix : WATER
Ext Btch ID: V001F47 % Moisture : NA
Calib. Ref.: REV408 Instrument ID : T-001
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	.51J	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.62J	5	.2
CHLOROMETHANE	.23J	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
1,3-DICHLOROPROPENE	ND	.5	.2
BROMOCHLOROMETHANE	.32J	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	65-135
TOLUENE-D8	103	75-125
BROMOFLUOROBENZENE	103	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
7. : Diluted out

Data File : E:\HPCHEM\1\DATA\06F24\RFV610.D
Acq On : 24 Jun 2006 5:34 pm
Sample : 06F248-06 25mls
Misc : DF=1

Vial: 12
Operator: AS
Inst : TO01
Multiplr: 1.00

MS Integration Params: 524INT.P

Quant Time: Jun 26 16:33 2006

Quant Results File: V001E19.RES

Quant Method : E:\HPCHEM\1\METHODS\V001E19.M (RTE Integrator)

Title : METHOD 8260 25mls

Last Update : Mon May 22 10:30:58 2006

Response via : Initial Calibration

DataAcq Meth : V001E19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	11.16	114	2172688✓	10.00	ug/l	0.00
36) CHLOROBENZENE-D5	16.38	117	1846905✓	10.00	ug/l	0.00
65) 1,2-DICHLOROBENZENE-D4	21.97	152	533116✓	10.00	ug/l	0.00
System Monitoring Compounds						
35) 1,2-Dichloroethane-d4	10.55	65	492559	11.03	ug/l	0.00
Spiked Amount	10.000		Recovery	=	110.30%	
48) Toluene-d8	13.69	98	2161982	10.27	ug/l	0.00
Spiked Amount	10.000		Recovery	=	102.70%	
69) 4-Bromofluorobenzene	18.68	95	660663	10.28	ug/l	0.00
Spiked Amount	10.000		Recovery	=	102.80%	
Target Compounds						
3) Chloromethane	3.68	50	16669	0.23	ug/l	83
12) Acetone	5.88	43	24078	4.06	ug/l	93
30) Chloroform	9.42	83	65348	0.62	ug/l	96
43) Bromodichloromethane	12.38	83	36792	0.51	ug/l	95
56) Dibromochloromethane	15.32	129	13619	0.32	ug/l	92

(#) = qualifier out of range (m) = manual integration
RFV610.D V001E19.M Mon Jun 26 16:33:26 2006

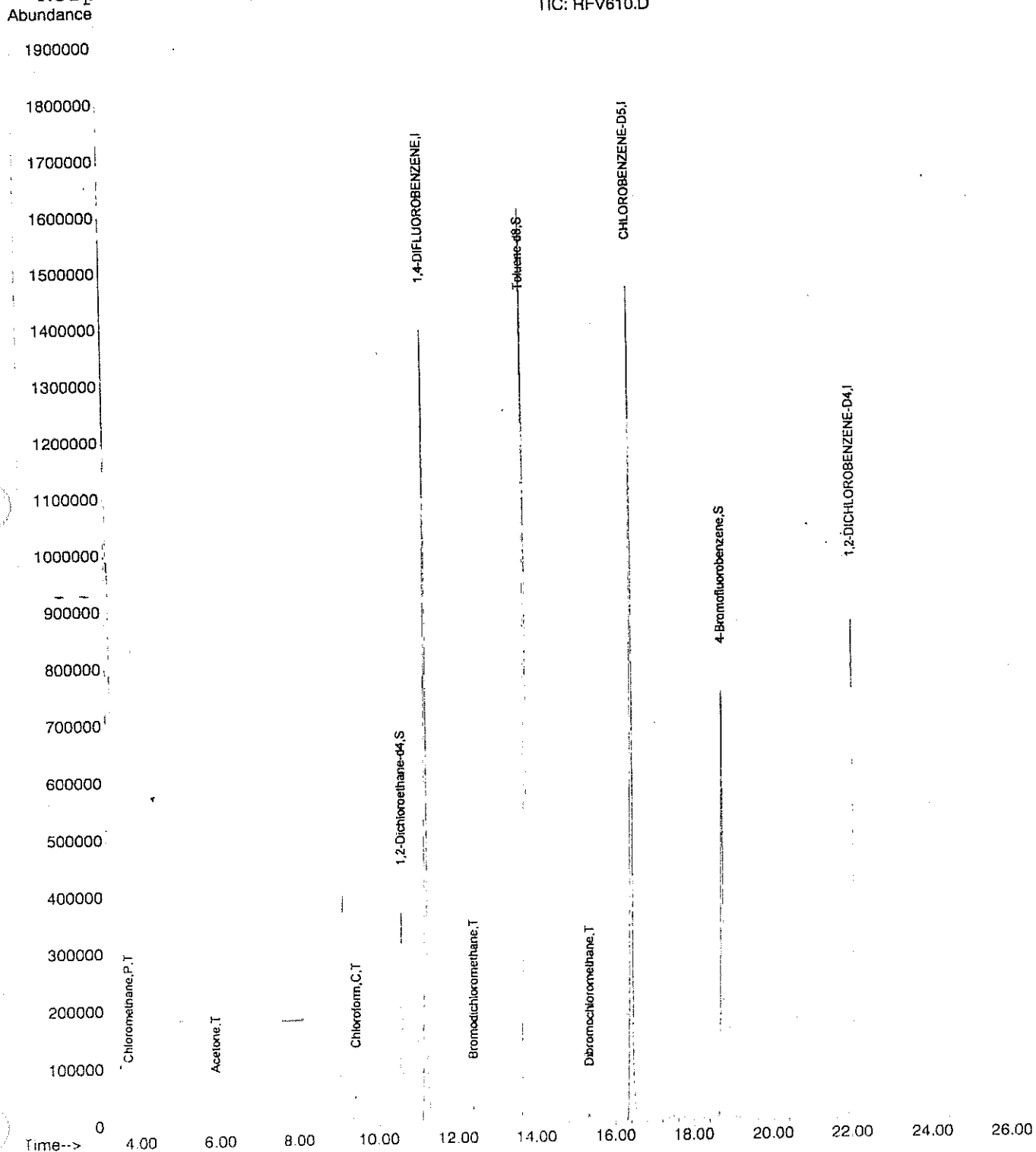
Page 1

2010

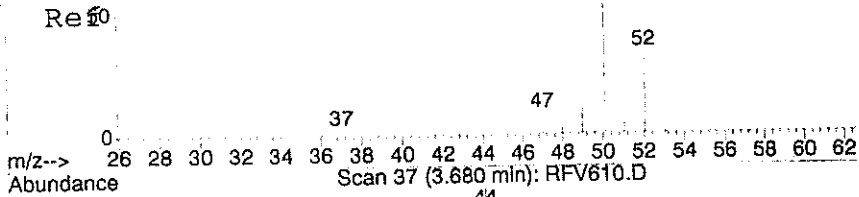
Vial: ~~LABORATORY, INC.~~
Operator: AS
Inst : T001
Multiplr: 1.00

Quant Results File: VO01E19.RES

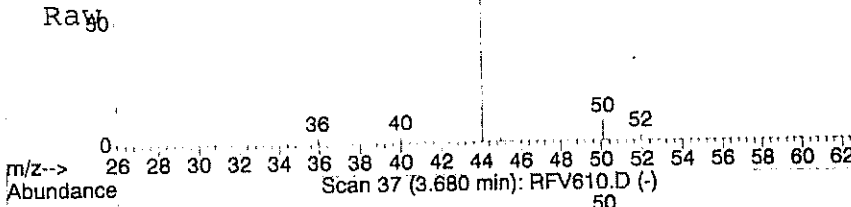
TIC: RFV610.D



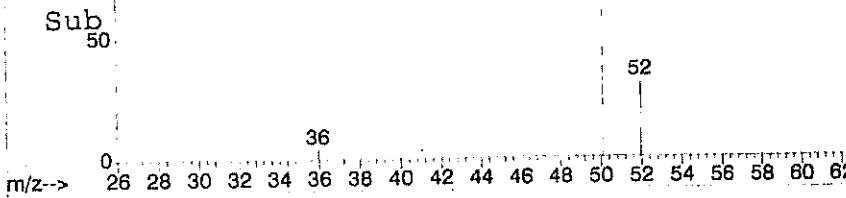
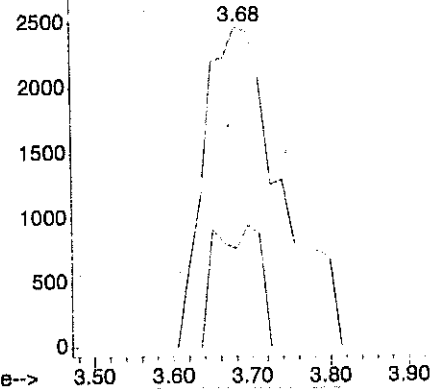
Chloromethane
Concen: 0.23 ug/l
RT: 3.68 min Scan# 37
Delta R.T. 0.03 min
Lab File: RFV610.D
Acq: 24 Jun 2006 5:34 pm



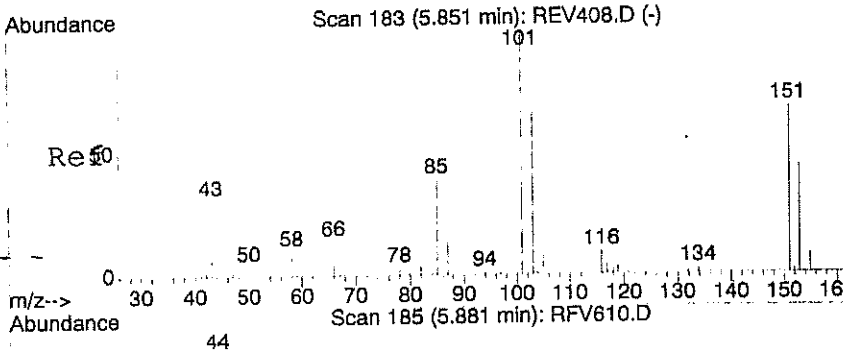
Tgt Ion: 50 Resp: 16669
Ion Ratio Lower Upper
50 100
52 23.0 2.8 62.8



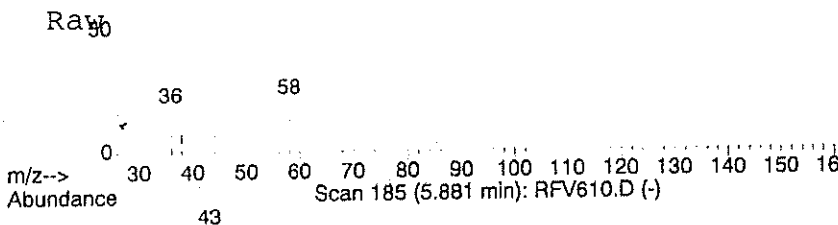
Abundance Ion 50.00 (49.70 to 50.70): RFV610.D
Ion 52.00 (51.70 to 52.70): RFV610.D



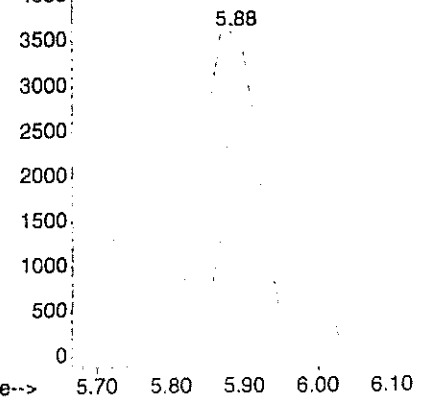
#12
Acetone
Concen: 4.06 ug/l
RT: 5.88 min Scan# 185
Delta R.T. 0.03 min
Lab File: RFV610.D
Acq: 24 Jun 2006 5:34 pm



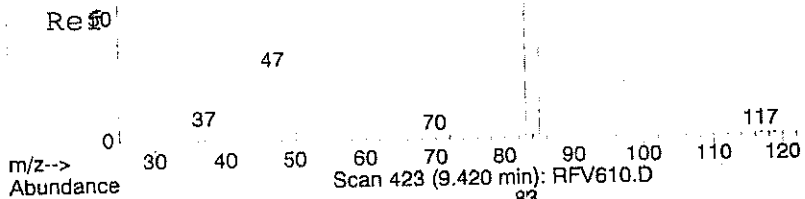
Tgt Ion: 43 Resp: 24078
Ion Ratio Lower Upper
43 100
58 25.0 0.0 58.6



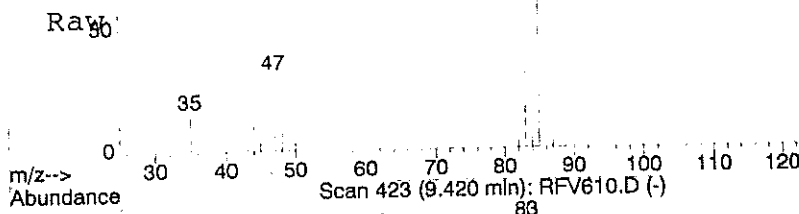
Abundance Ion 43.00 (42.70 to 43.70): RFV610.D
Ion 58.00 (57.70 to 58.70): RFV610.D



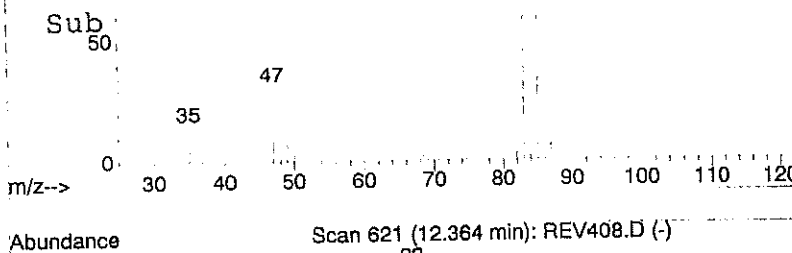
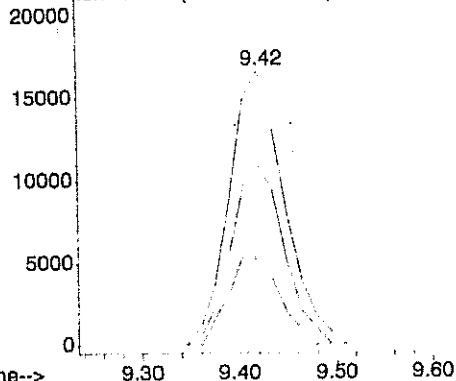
Chloroform
 Concen: 0.62 ug/l
 RT: 9.42 min Scan# 423
 Delta R.T. 0.02 min
 Lab File: RFV610.D
 Acq: 24 Jun 2006 5:34 pm



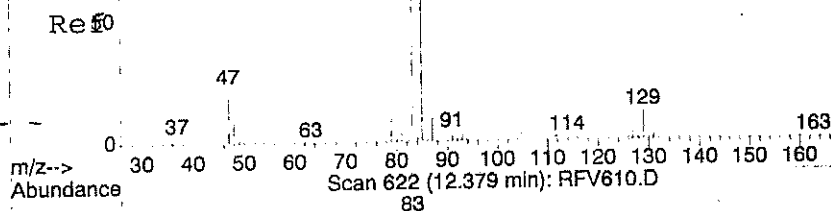
Tgt Ion:	83	Resp:	65348
Ion	Ratio	Lower	Upper
83	100		
85	63.8	36.5	96.5
47	30.5	0.0	57.1



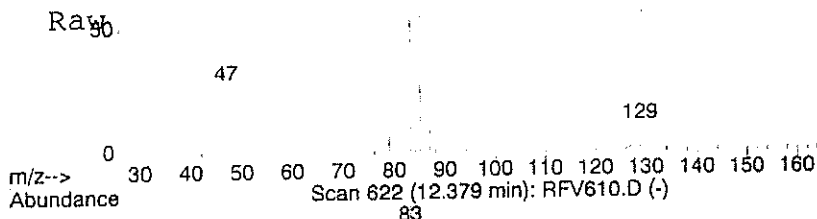
Abundance Ion 83.00 (82.70 to 83.70): RFV610.D
 Ion 85.00 (84.70 to 85.70): RFV610.D
 Ion 47.00 (46.70 to 47.70): RFV610.D



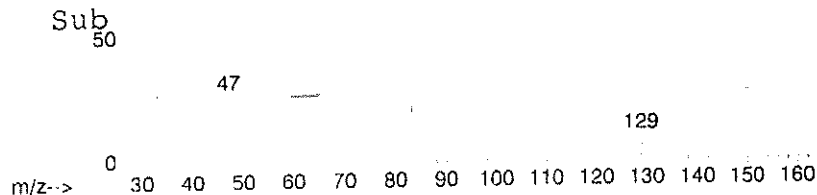
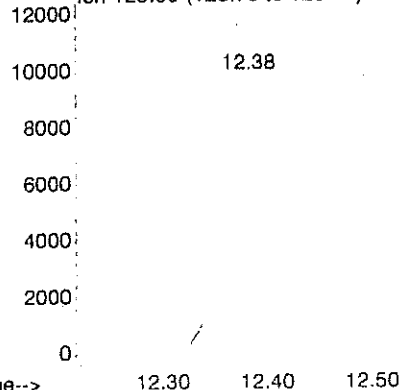
#43
 Bromodichloromethane
 Concen: 0.51 ug/l
 RT: 12.38 min Scan# 622
 Delta R.T. 0.02 min
 Lab File: RFV610.D
 Acq: 24 Jun 2006 5:34 pm



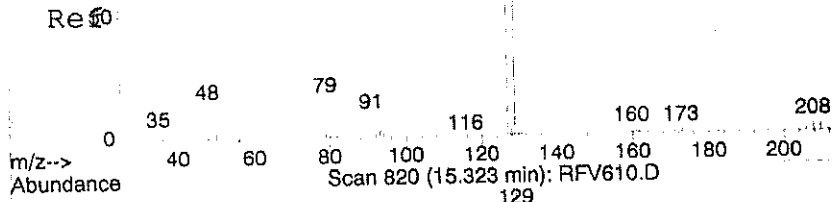
Tgt Ion:	83	Resp:	36792
Ion	Ratio	Lower	Upper
83	100		
85	62.6	35.2	95.2
129	5.8	0.0	40.3



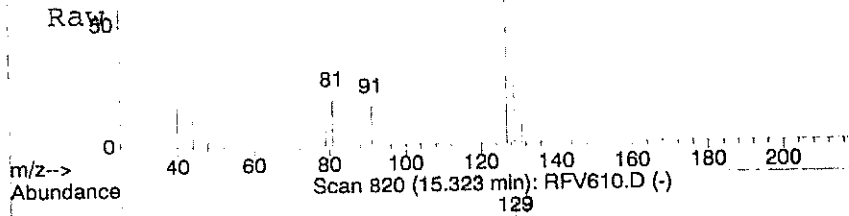
Abundance Ion 83.00 (82.70 to 83.70): RFV610.D
 Ion 85.00 (84.70 to 85.70): RFV610.D
 Ion 129.00 (128.70 to 129.70): RFV610



Dibromochloromethane
 Concen: 0.32 ug/l
 RT: 15.32 min Scan# 820
 Delta R.T. 0.02 min
 Lab File: RFV610.D
 Acq: 24 Jun 2006 5:34 pm

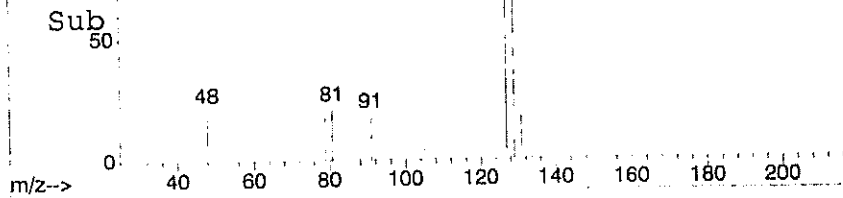
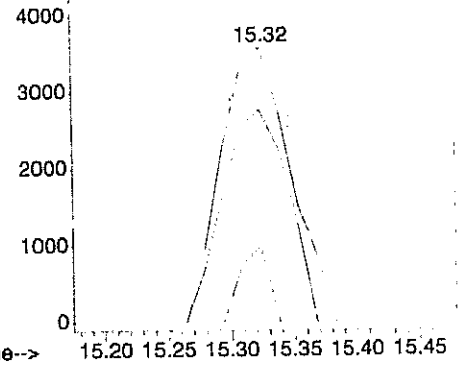


Tgt Ion:	129	Resp:	13619
Ion	Ratio	Lower	Upper
129	100		
127	73.3	46.3	106.3
131	11.3	0.0	53.3



Abundance

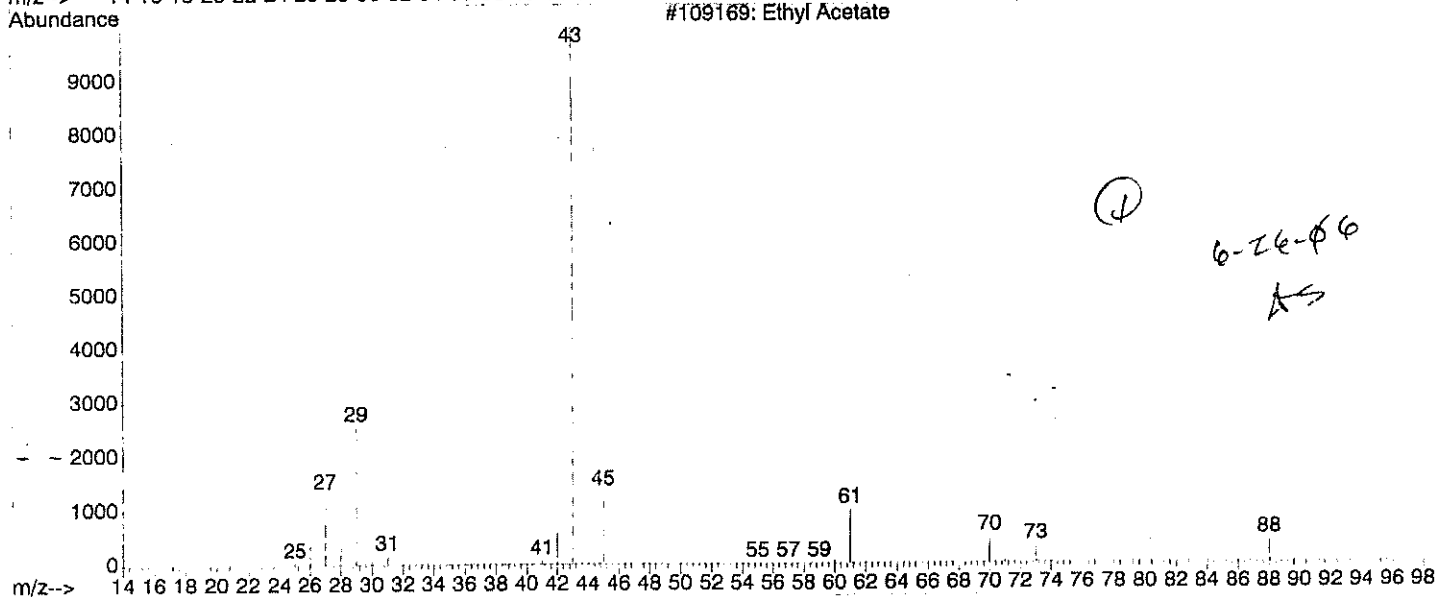
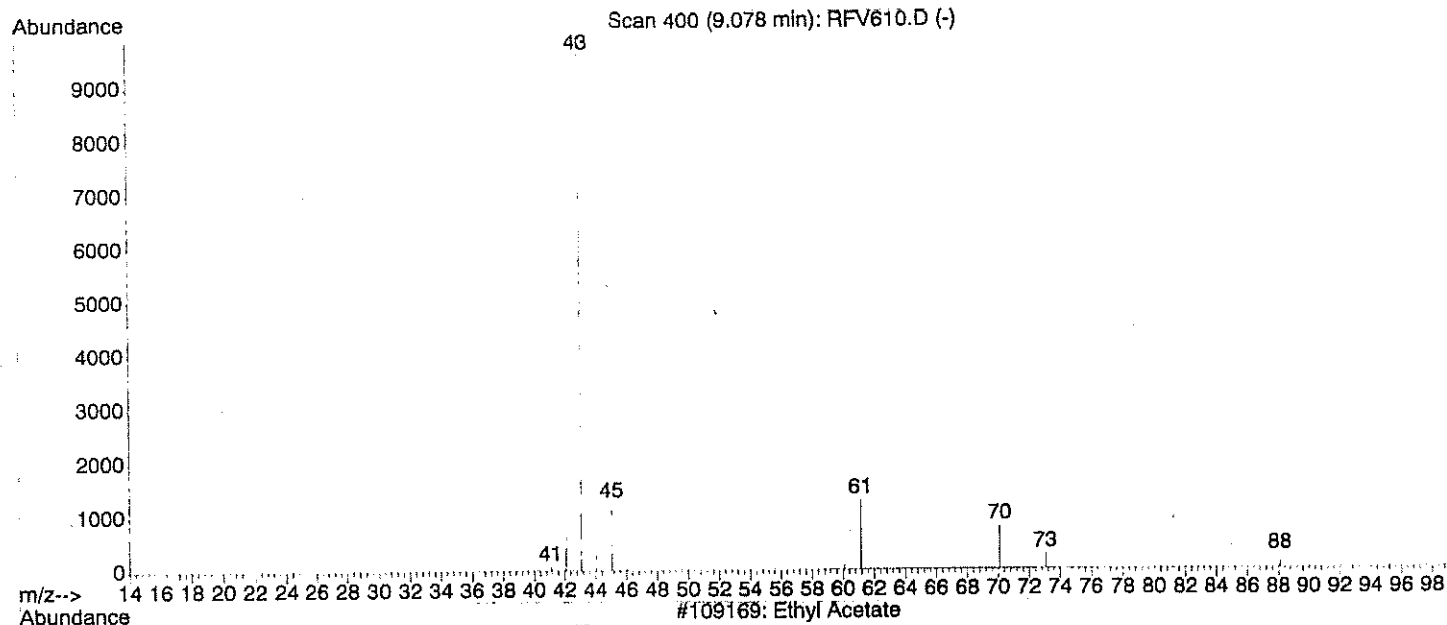
Ion 129.00 (128.70 to 129.70): RFV610
 Ion 127.00 (126.70 to 127.70): RFV610
 Ion 131.00 (130.70 to 131.70): RFV610



Quality
ID

: 83
: Ethyl Acetate

5170-1A
LABORATORY, INC.



6-26-06
AS

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Client : SES-TECH	Date Collected: 06/21/06
Project : CAMP PENDLETON, UST SITE 14131	Date Received: 06/22/06
Batch No. : 06F248	Date Extracted: 06/24/06 18:12
Sample ID: 10-14131-007	Date Analyzed: 06/24/06 18:12
Lab File ID: F248-07	Dilution Factor: 1
Lab File ID: RFV611	Matrix : WATER
Ext Btch ID: V001F47	% Moisture : NA
Calib. Ref.: REV408	Instrument ID : T-001

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PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.22J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
1,3-DICHLOROPROPENE	ND	.5	.2
MONOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	65-135
TOLUENE-D8	103	75-125
BROMOFLUOROBENZENE	103	75-125

R.L. : Reporting limit
 * : Out of QC
 E : Exceeded calibration range
 B : Found in associated method blank
 J : Value between R.L. and MDL
 D : Value from dilution analysis
 D.O. : Diluted out

QC SUMMARIES

Client : SES-TECH Date Collected: NA
Project : CAMP PENDLETON, UST SITE 14131 Date Received: 06/24/06
Batch No. : 06F248 Date Extracted: 06/24/06 14:22
ID: MBLK1W Date Analyzed: 06/24/06 14:22
Lab File ID: RFV605 Dilution Factor: 1
Ext Btch ID: V001F47 Matrix : WATER
Calib. Ref.: REV408 % Moisture : NA
Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
1,3-DICHLOROPROPENE	ND	.5	.2
1,1-DICHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-04	95	65-135
TOLUENE-08	95	75-125
BROMOFLUOROBENZENE	96	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
Q : Diluted out

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

LABORATORY, INC.

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: SW 5030B/8260B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: V001F47Q V001F47L V001F47C
LAB FILE ID: RFV605 RFV602 RFV603
DATE EXTRACTED: 06/24/0614:22 06/24/0612:27 06/24/0613:05 DATE COLLECTED: NA
DATE ANALYZED: 06/24/0614:22 06/24/0612:27 06/24/0613:05 DATE RECEIVED: 06/24/06
PREP. BATCH: V001F47 V001F47 V001F47
CALIB. REF: REV408 REV408 REV408

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	10	8.6	86	10	8.22	82	5	75-125	20
Benzene	ND	10	8.5	85	10	8.24	82	3	75-125	20
Chlorobenzene	ND	10	9.57	96	10	9.39	94	2	75-125	20
Toluene	ND	10	9.04	90	10	8.8	88	3	75-125	20
Trichloroethene	ND	10	8.42	84	10	8.26	83	2	75-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10	9.08	91	10	8.63	86	65-135
Toluene-d8	10	9.37	94	10	8.96	90	75-125
p-fluorobenzene	10	8.99	90	10	8.65	87	75-125

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

5478571
LABORATORIES, INC.

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: SW 5030B/8260B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: 10-14131-004
LAB SAMP ID: F248-04 F248-04M F248-04S
LAB FILE ID: RFV613 RFV614 RFV615
DATE EXTRACTED: 06/24/0619:29 06/24/0620:07 06/24/0620:45 DATE COLLECTED: 06/21/06
DATE ANALYZED: 06/24/0619:29 06/24/0620:07 06/24/0620:45 DATE RECEIVED: 06/22/06
PREP. BATCH: V001F47 V001F47 V001F47
CALIB. REF: REV408 REV408 REV408

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	10	8.97	90	10	9.02	90	1	75-125	20
Benzene	ND	10	8.74	87	10	8.72	87	0	75-125	20
Chlorobenzene	ND	10	9.94	99	10	9.89	99	1	75-125	20
Toluene	ND	10	9.62	96	10	9.36	94	3	75-125	20
Trichloroethene	ND	10	8.47	85	10	8.37	84	1	75-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10	10.7	107	10	10.2	102	65-135
Toluene-d8	10	9.67	97	10	9.88	99	75-125
p-fluorobenzene	10	9.1	91	10	9.38	94	75-125

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14131

METHOD 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

SDG#: 06F248

CASE NARRATIVE

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
SDG: 06F248

METHOD 3520C/8270C SIM SEMI VOLATILE ORGANICS BY GC/MS

Six (6) water samples were received on 06/22/06 for Semi Volatile Organic analysis by Method 3520C/8270C SIM in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. Method Blank

Method blank was free of contamination at half of the reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

Recoveries were within QC limit.

6. Matrix Spike/Matrix Spike Duplicate

Sample F248-04 was spiked. All recoveries were within QC limit. RPD of one analyte was above QC.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

LAB CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

ENVIA
LABORATORIES, INC.

SDG NO. : 06F248
Instrument ID : T-048

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14131

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	WATER			Sample Data FN	Calibration Data FN	Prep. Batch	Notes
				Analysis DateTime	Extraction DateTime					
MBLK1W	SVF033WB	1	NA	06/27/0616:07	06/26/0613:30	RFZ448	RFZ008	SVF033W	Method Blank	
LCS1W	SVF033WL	1	NA	06/27/0616:26	06/26/0613:30	RFZ449	RFZ008	SVF033W	Lab Control Sample (LCS)	
10-14131-002	F248-02	.95	NA	06/27/0619:19	06/26/0613:30	RFZ458	RFZ008	SVF033W	Field Sample	
10-14131-003	F248-03	.95	NA	06/27/0619:38	06/26/0613:30	RFZ459	RFZ008	SVF033W	Field Sample	
10-14131-004	F248-04	.99	NA	06/27/0619:57	06/26/0613:30	RFZ460	RFZ008	SVF033W	Field Sample	
10-14131-004MS	F248-04M	.98	NA	06/27/0620:16	06/26/0613:30	RFZ461	RFZ008	SVF033W	Matrix Spike Sample (MS)	
10-14131-004MSD	F248-04S	.98	NA	06/27/0620:36	06/26/0613:30	RFZ462	RFZ008	SVF033W	MS Duplicate (MSD)	
10-14131-005	F248-05	.99	NA	06/27/0620:55	06/26/0613:30	RFZ463	RFZ008	SVF033W	Field Sample	
10-14131-006	F248-06	.99	NA	06/27/0621:15	06/26/0613:30	RFZ464	RFZ008	SVF033W	Field Sample	
10-14131-007	F248-07	.95	NA	06/27/0621:34	06/26/0613:30	RFZ465	RFZ008	SVF033W	Field Sample	

FN - Filename
% Moist - Percent Moisture

30002

SAMPLE RESULTS

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

ENVIRONMENTAL
LABORATORIES, INC.

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=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID   : 10-14131-002                 Date Analyzed: 06/27/06 19:19
Lab Samp ID : F248-02                      Dilution Factor: .95
Lab File ID : RFZ458                       Matrix          : WATER
Ext Btch ID : SVF033W                      % Moisture      : NA
Calib. Ref. : RFZ008                       Instrument ID   : T-048
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.95	.19
ACENAPHTHYLENE	ND	.95	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.95	.19
BENZO(B)FLUORANTHENE	ND	.95	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.95	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.95	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.95	.19
PHTHALENE	ND	.95	.19
ANTHRENE	ND	.95	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	89	50-130

RL: Reporting Limit

3204

=====

Client : SES-TECH	Date Collected: 06/21/06
Project : CAMP PENDLETON, UST SITE 14131	Date Received: 06/22/06
Batch No. : 06F248	Date Extracted: 06/26/06 13:30
Sample ID: 10-14131-003	Date Analyzed: 06/27/06 19:38
Lab Samp ID: F248-03	Dilution Factor: .95
Lab File ID: RF2459	Matrix : WATER
Ext Btch ID: SVF033W	% Moisture : NA
Calib. Ref.: RF2008	Instrument ID : T-048

=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.95	.19
ACENAPHTHYLENE	ND	.95	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.95	.19
BENZO(B)FLUORANTHENE	ND	.95	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.95	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.95	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.95	.19
PHANTHALENE	ND	.95	.19
PERANTHRENE	ND	.95	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	104	50-130

RL: Reporting Limit

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

LABORATORY, INC.

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=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID   : 10-14131-004                 Date Analyzed: 06/27/06 19:57
Lab Samp ID : F248-04                      Dilution Factor: .99
Lab File ID : RF2460                       Matrix          : WATER
Ext Btch ID : SVF033W                     % Moisture       : NA
Calib. Ref. : RF2008                      Instrument ID    : T-048
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.99	.2
ACENAPHTHYLENE	ND	.99	.2
ANTHRACENE	ND	2	.2
BENZO(A)ANTHRACENE	ND	2	.2
BENZO(A)PYRENE	ND	.99	.2
BENZO(B)FLUORANTHENE	ND	.99	.2
BENZO(K)FLUORANTHENE	ND	2	.2
BENZO(G,H,I)PERYLENE	ND	.99	.2
CHRYSENE	ND	2	.2
DIBENZO(A,H)ANTHRACENE	ND	.99	.2
FLUORANTHENE	ND	2	.2
FLUORENE	ND	2	.2
INDENO(1,2,3-CD)PYRENE	ND	.99	.2
PHANTHRENE	ND	.99	.2
PHANTHRENE	ND	.99	.2
PYRENE	ND	2	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	91	50-130

RL: Reporting Limit

3006

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

SIWA
LABORATORIES, INC.

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=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID: 10-14131-005                     Date Analyzed: 06/27/06 20:55
Lab Samp ID: F248-05                         Dilution Factor: .99
Lab File ID: RFZ463                          Matrix       : WATER
Ext Btch ID: SVF033W                        % Moisture   : NA
Calib. Ref.: RFZ008                         Instrument ID : T-048
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.99	.2
ACENAPHTHYLENE	ND	.99	.2
ANTHRACENE	ND	2	.2
BENZO(A)ANTHRACENE	ND	2	.2
BENZO(A)PYRENE	ND	.99	.2
BENZO(B)FLUORANTHENE	ND	.99	.2
BENZO(K)FLUORANTHENE	ND	2	.2
BENZO(G,H,I)PERYLENE	ND	.99	.2
CHRYSENE	ND	2	.2
DIBENZO(A,H)ANTHRACENE	ND	.99	.2
FLUORANTHENE	ND	2	.2
FLUORENE	ND	2	.2
INDENO(1,2,3-CD)PYRENE	ND	.99	.2
PHTHALENE	ND	.99	.2
ENANTHRENE	ND	.99	.2
PYRENE	ND	2	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	88	50-130

RL: Reporting Limit

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

LABORATORY, INC.

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=====
Client       : SES-TECH                      Date Collected: 06/21/06
Project      : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.    : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID    : 10-14131-006                 Date Analyzed: 06/27/06 21:15
Lab Samp ID  : F248-06                      Dilution Factor: .99
Lab File ID  : RFZ464                       Matrix         : WATER
Ext Btch ID  : SVF033W                      % Moisture      : NA
Calib. Ref.  : RFZ008                       Instrument ID   : T-048
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.99	.2
ACENAPHTHYLENE	ND	.99	.2
ANTHRACENE	ND	2	.2
BENZO(A)ANTHRACENE	ND	2	.2
BENZO(A)PYRENE	ND	.99	.2
BENZO(B)FLUORANTHENE	ND	.99	.2
BENZO(K)FLUORANTHENE	ND	2	.2
BENZO(G,H,I)PERYLENE	ND	.99	.2
CHRYSENE	ND	2	.2
DIBENZO(A,H)ANTHRACENE	ND	.99	.2
FLUORANTHENE	ND	2	.2
FLUORENE	ND	2	.2
INDENO(1,2,3-CD)PYRENE	ND	.99	.2
PHANTHALENE	ND	.99	.2
ENANTHRENE	ND	.99	.2
PYRENE	ND	2	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	78	50-130

RL: Reporting Limit

3000

Data File : D:\CHEMDATA\06F27\RFZ464.D
Acq On : 27 JUN 2006 21:15
Sample : 06F248-06
Misc :

Vial: 19
Operator: SG
Inst : TO48
Multiplr: 1.00

MS Integration Params: RTEINT.P
Quant Time: Jun 28 13:47 2006

Quant Results File: SV48F02.RES

Quant Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
Response via : Initial Calibration
DataAcq Meth :

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.96	152	214959	10.00	ng	0.00
20) Phenanthrene-d10	7.04	188	428636	10.00	ng	0.00
28) Perylene-d12	10.84	264	255660	10.00	ng	0.00
System Monitoring Compounds						
3) Phenol-d5	2.67	99	8129	0.27	ng	0.00
27) Terphenyl-d14	8.59	244	106571	3.90	ng	0.00
Target Compounds						Qvalue
31) bis(2-Ethylhexyl)phthalate	9.65	149	69123	1.33	ng	88

(#) = qualifier out of range (m) = manual integration
RFZ464.D SV48F02.M Wed Jun 28 13:48:42 2006

TO48

Page 1

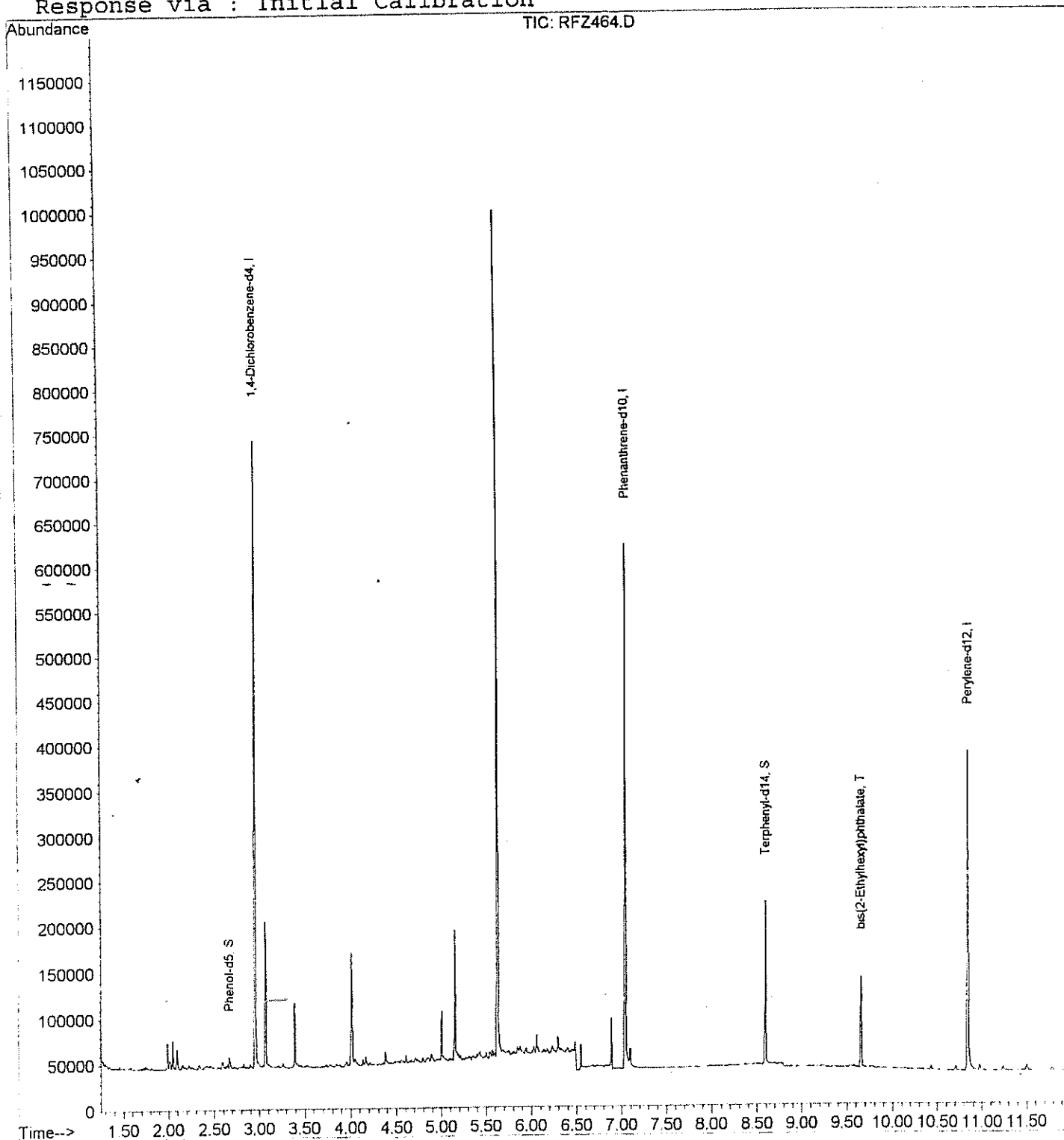
3000

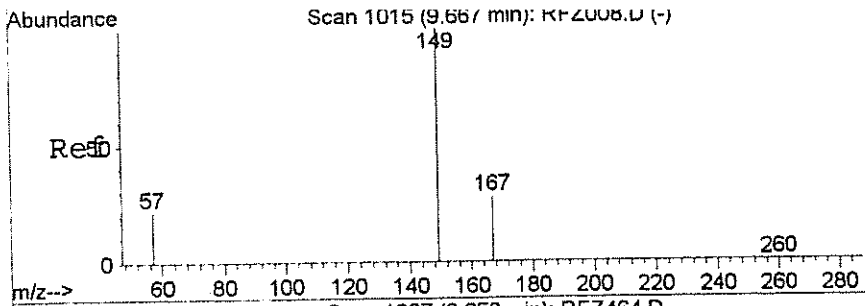
Data File : D:\CHEMDATA\06F27\RFZ464.D
Acq On : 27 JUN 2006 21:15
Sample : 06F248-06
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 28 13:47 2006

Vial: 19
Operator: SG
Inst : TO48
Multiplr: 1.00

Quant Results File: SV48F02.RES

Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
Response via : Initial Calibration





#31

bis(2-Ethylhexyl)phosphate

Concen: 1.33 ng

RT: 9.65 min Scan# 1007

Delta R.T. -0.02 min

Lab File: RFZ464.D

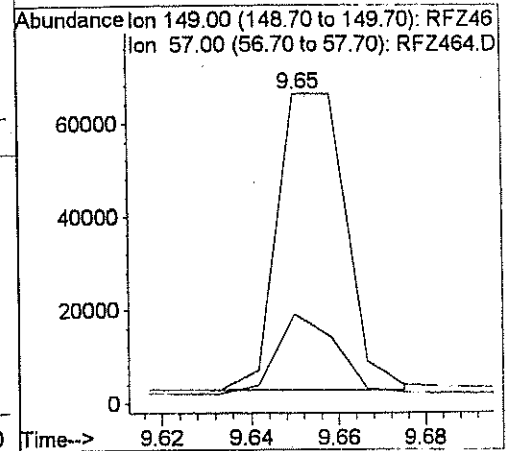
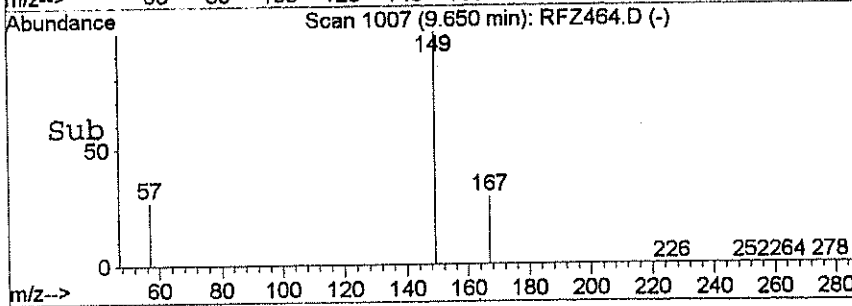
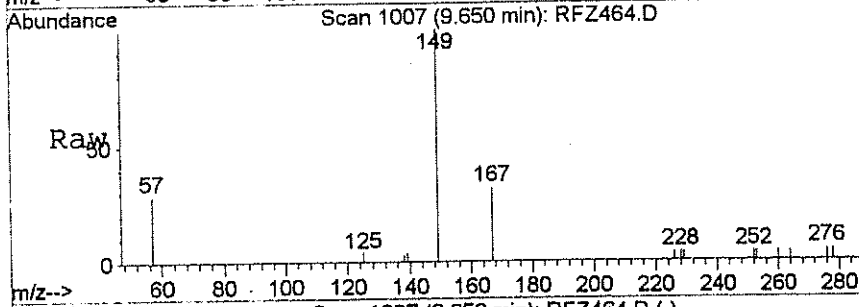
Acq: 27 JUN 2006 21:15

Tgt Ion:149 Resp: 69123

Ion Ratio Lower Upper

149 100

57 28.7 0.0 52.8



PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.95
ACENAPHTHYLENE	ND	.95
ANTHRACENE	ND	1.9
BENZO(A)ANTHRACENE	ND	1.9
BENZO(A)PYRENE	ND	.95
BENZO(B)FLUORANTHENE	ND	.95
BENZO(K)FLUORANTHENE	ND	1.9
BENZO(G,H,I)PERYLENE	ND	.95
CHRYSENE	ND	1.9
DIBENZO(A,H)ANTHRACENE	ND	.95
FLUORANTHENE	ND	1.9
FLUORENE	ND	1.9
INDENO(1,2,3-CD)PYRENE	ND	.95
PHTHALENE	ND	.95
ENANTHRENE	ND	.95
PYRENE	ND	1.9

RL: Reporting Limit

QC SUMMARY

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

06/27/06 16:07
MERRASCH, JLG

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=====
Client      : SES-TECH                      Date Collected: NA
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/26/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID   : MBLK1W                       Date Analyzed: 06/27/06 16:07
Lab Samp ID : SVF033WB                     Dilution Factor: 1
Lab File ID : RFZ448                       Matrix       : WATER
Ext Btch ID : SVF033W                      % Moisture   : NA
Calib. Ref. : RFZ008                      Instrument ID : T-048
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	1	.2
ACENAPHTHYLENE	ND	1	.2
ANTHRACENE	ND	2	.2
BENZO(A)ANTHRACENE	ND	2	.2
BENZO(A)PYRENE	ND	1	.2
BENZO(B)FLUORANTHENE	ND	1	.2
BENZO(K)FLUORANTHENE	ND	2	.2
BENZO(G,H,I)PERYLENE	ND	1	.2
CHRYSENE	ND	2	.2
DIBENZO(A,H)ANTHRACENE	ND	1	.2
FLUORANTHENE	ND	2	.2
FLUORENE	ND	2	.2
INDENO(1,2,3-CD)PYRENE	ND	1	.2
PHTHALENE	ND	1	.2
ANANTHRENE	ND	1	.2
PYRENE	ND	2	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	95	50-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

LABORATORY
ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
CH NO.: 06F248
METHOD: SW 3520C/8270C SIM

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1
SAMPLE ID: MBLK1W
LAB SAMP ID: SVF033WB SVF033WL
LAB FILE ID: RFZ448 RFZ449
DATE EXTRACTED: 06/26/0613:30 06/26/0613:30 DATE COLLECTED: NA
DATE ANALYZED: 06/27/0616:07 06/27/0616:26 DATE RECEIVED: 06/26/06
PREP. BATCH: SVF033W SVF033W
CALIB. REF: RFZ008 RFZ008

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Acenaphthene	ND	10	9.75	97	40-130
Acenaphthylene	ND	10	9.32	93	40-130
Anthracene	ND	10	9.12	91	50-130
Benzo(a)anthracene	ND	10	10.8	108	50-130
Benzo(a)pyrene	ND	10	9.79	98	50-130
Benzo(b)fluoranthene	ND	10	12.7	127	50-130
Benzo(k)fluoranthene	ND	10	8.18	82	30-150
Benzo(g,h,i)perylene	ND	10	10.1	101	50-130
Chrysene	ND	10	9.7	97	50-130
Dibenzo(a,h)anthracene	ND	10	9.93	99	40-140
Fluoranthene	ND	10	9.76	98	50-130
Fluorene	ND	10	10.3	103	40-130
Indeno(1,2,3-cd)pyrene	ND	10	10.2	102	30-140
Naphthalene	ND	10	7.41	74	30-130
Phenanthrene	ND	10	9.09	91	40-130
Pyrene	ND	10	9.63	96	40-130

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Terphenyl-d14	5	4.75	95	50-130

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

EMAX
LABORATORY, INC.

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
CH NO.: 06F248
METHOD: SW 3520C/8270C SIM

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: .99 .98 .98
SAMPLE ID: 10-14131-004
LAB SAMP ID: F248-04 F248-04M F248-04S
LAB FILE ID: RFZ460 RFZ461 RFZ462
DATE EXTRACTED: 06/26/0613:30 06/26/0613:30 06/26/0613:30 DATE COLLECTED: 06/21/06
DATE ANALYZED: 06/27/0619:57 06/27/0620:16 06/27/0620:36 DATE RECEIVED: 06/22/06
PREP. BATCH: SVF033W SVF033W SVF033W
CALIB. REF: RFZ008 RFZ008 RFZ008

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Acenaphthene	ND	9.8	12	122	9.8	8.84	90	30	40-130	30
Acenaphthylene	ND	9.8	11.4	117	9.8	8.55	87	29	40-130	30
Anthracene	ND	9.8	9.34	95	9.8	8.38	85	11	50-130	30
Benzo(a)anthracene	ND	9.8	9.52	97	9.8	9.76	100	2	50-130	30
Benzo(a)pyrene	ND	9.8	8.82	90	9.8	8.63	88	2	50-130	30
Benzo(b)fluoranthene	ND	9.8	9.37	96	9.8	9.3	95	1	50-130	30
Benzo(k)fluoranthene	ND	9.8	9.79	100	9.8	9.29	95	5	30-150	30
Benzo(g,h,i)perylene	ND	9.8	9.55	97	9.8	8.88	91	7	50-130	30
Chrysene	ND	9.8	8.69	89	9.8	8.67	89	0	50-130	30
Dibenzo(a,h)anthracene	ND	9.8	9.51	97	9.8	8.99	92	6	40-140	30
Fluoranthene	ND	9.8	9.62	98	9.8	9.33	95	3	50-130	30
Fluorene	ND	9.8	12.1	124	9.8	9.17	94	28	40-130	30
Indeno(1,2,3-cd)pyrene	ND	9.8	9.61	98	9.8	8.99	92	7	30-140	30
Naphthalene	ND	9.8	10.1	103	9.8	7.03	72	36*	30-130	30
Phenanthrene	ND	9.8	9.23	94	9.8	8.19	84	12	40-130	30
Pyrene	ND	9.8	9.57	98	9.8	9.17	94	4	40-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
Terphenyl-d14	4.9	4.04	82	4.9	4.93	101	50-130

2016

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14131

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 06F248

CASE NARRATIVE

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
SDG: 06F248

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Three (3) soil samples were received on 06/22/06 for Total Petroleum Hydrocarbons by Extraction analysis by Method 3520C/8015B in accordance with SW846 3RD Edition.

1. Holding Time

Analytical holding time was met. Extraction was performed on 06/26/06 and completed on 06/27/06.

2. Calibration

Initial calibration was seven points for Diesel. %RSDs were within 20%. Continuing calibrations were carried out within 12-hour intervals and all recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at half of the reporting limit.

4. Surrogate Recovery

All recoveries were within QC limits.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

Sample F248-04 was spiked. Recoveries were within QC limits.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met. Sample results were quantitated from C10 to C24 using Diesel (C10-C24) calibration factor.

Samples F248-05 and -06 displayed motor oil-like fuel pattern.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG NO. : 06f248
Instrument ID : GCT050

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14131

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	WATER		Extraction Date/Time	Sample Data FN	Calibration Prep. Data FN	Batch	Notes
				Analysis Date/Time						
MBLK1W	DSF038WB	1	NA	06/27/0613:14		06/26/0613:30	TF27005A	TF27002A	DSF038W	Method Blank
LCS1W	DSF038WL	1	NA	06/27/0613:56		06/26/0613:30	TF27006A	TF27002A	DSF038W	Lab Control Sample (LCS)
LCD1W	DSF038WC	1	NA	06/27/0614:39		06/26/0613:30	TF27007A	TF27002A	DSF038W	LCS Duplicate
10-14131-002	F248-02	.94	NA	06/27/0615:21		06/26/0613:30	TF27008A	TF27002A	DSF038W	Field Sample
10-14131-003	F248-03	.96	NA	06/27/0616:04		06/26/0613:30	TF27009A	TF27002A	DSF038W	Field Sample
10-14131-004	F248-04	.98	NA	06/27/0616:46		06/26/0613:30	TF27010A	TF27002A	DSF038W	Field Sample
10-14131-004MS	F248-04M	1.01	NA	06/27/0617:29		06/26/0613:30	TF27011A	TF27002A	DSF038W	Matrix Spike Sample (MS)
10-14131-004MSD	F248-04S	1	NA	06/27/0618:11		06/26/0613:30	TF27012A	TF27002A	DSF038W	MS Duplicate (MSD)
10-14131-005	F248-05	.95	NA	06/27/0619:36		06/26/0613:30	TF27014A	TF27002A	DSF038W	Field Sample
10-14131-006	F248-06	.98	NA	06/27/0620:19		06/26/0613:30	TF27015A	TF27002A	DSF038W	Field Sample
10-14131-007	F248-07	.95	NA	06/27/0618:54		06/26/0613:30	TF27013A	TF27002A	DSF038W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

EMAX
LABORATORIES, INC.

```

=====
Client       : SES-TECH                      Date Collected: 06/21/06
Project      : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Patch No.    : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID:   10-14131-002                   Date Analyzed: 06/27/06 15:21
Sample ID:   F248-02                        Dilution Factor: .94
Lab File ID: TF27008A                      Matrix       : WATER
Ext Btch ID: DSF038W                       % Moisture    : NA
Calib. Ref.: TF27002A                      Instrument ID : GCT050
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	90	65-135

RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

55004

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

EMAX
LABORATORIES, INC.

```
=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID: 10-14131-003                   Date Analyzed: 06/27/06 16:04
Lab Samp ID: F248-03                      Dilution Factor: .96
Lab File ID: TF27009A                     Matrix       : WATER
Ext Btch ID: DSF038W                     % Moisture   : NA
Calib. Ref.: TF27002A                     Instrument ID : GCT050
=====
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.096	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	85	65-135

RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

METHOD 3520C/80158
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

5177674
LABORATORIES, INC.

```

=====
Client       : SES-TECH                      Date Collected: 06/21/06
Project      : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Sample No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID    : 10-14131-004                 Date Analyzed: 06/27/06 16:46
Lab Samp ID  : F248-04                     Dilution Factor: .98
Lab File ID  : TF27010A                    Matrix       : WATER
Ext Btch ID  : DSF038W                     % Moisture    : NA
Calib. Ref.  : TF27002A                    Instrument ID  : GCT050
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.098	.025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	94	65-135

RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

LABORATORY, INC.

```

=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
File ID:    10-14131-005                   Date Analyzed: 06/27/06 19:36
Samp ID:    F248-05                       Dilution Factor: .95
Lab File ID: TF27014A                     Matrix          : WATER
Ext Btch ID: DSF038W                      % Moisture       : NA
Calib. Ref.: TF27002A                     Instrument ID    : GCT050
=====

```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	.95	.095	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	100	65-135

RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION



```

=====
Client      : SES-TECH                      Date Collected: 06/21/06
Project     : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.   : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID: 10-14131-006                   Date Analyzed: 06/27/06 20:19
Sample ID: F248-06                       Dilution Factor: .98
Lab File ID: TF27015A                     Matrix          : WATER
Ext Btch ID: DSF038W                      % Moisture       : NA
Calib. Ref.: TF27002A                     Instrument ID    : GCT050
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	1	.098	.025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	103	65-135

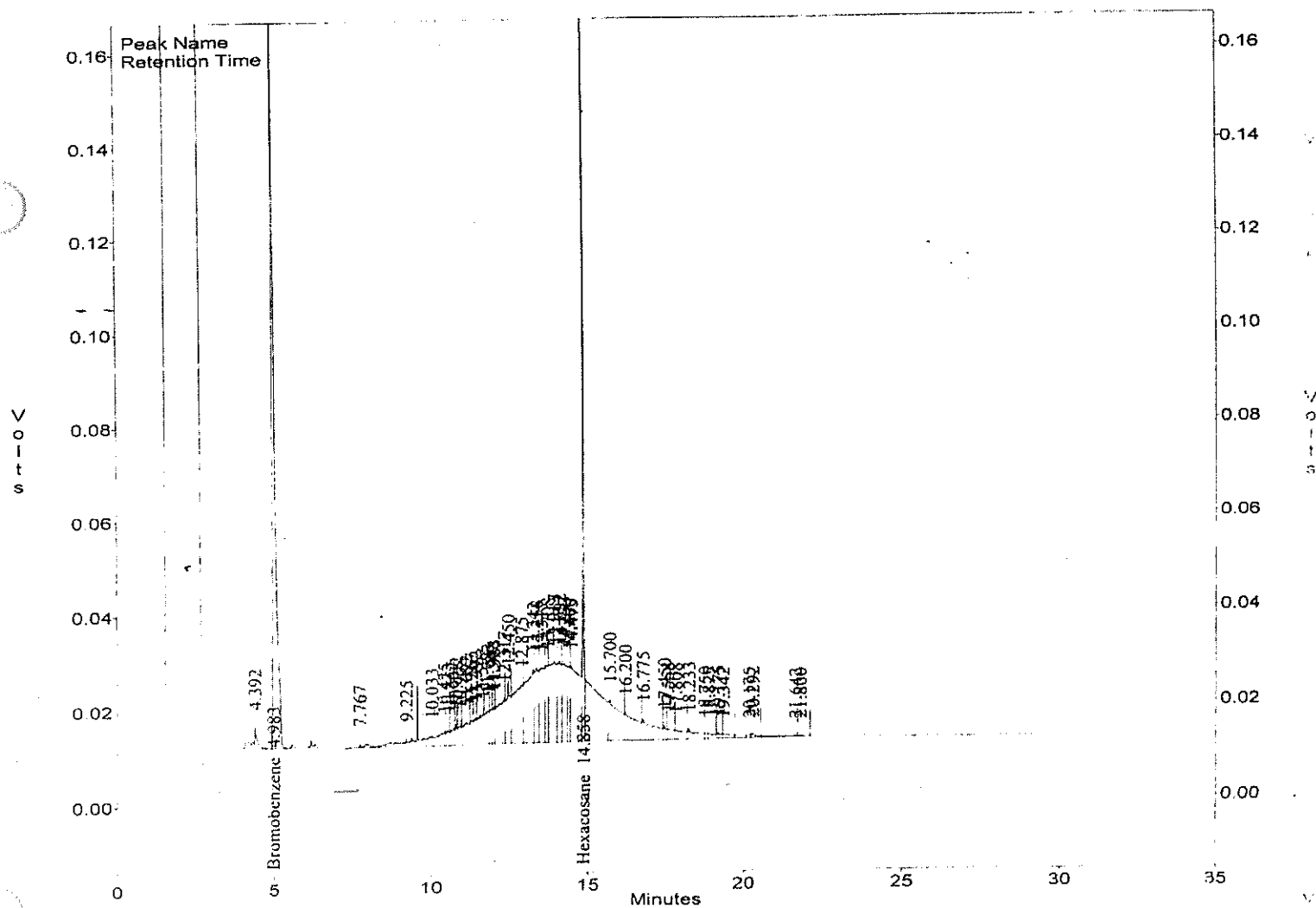
RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

File : c:\ezchrom\chrom\tf27\tf27.015
 Method : c:\ezchrom\methods\ds50d18.met
 Sample ID : 06F248-06
 Acquired : Jun 27, 2006 20:19:17
 Printed : Jun 29, 2006 16:55:54
 User : JANE

Channel A Results

#	Peak Name	Ret. Time (Min)	Area	Ave. CF	ESTD Conc. (ppm)
2	Bromobenzene	4.983	992955	11886.6	83.5
30	Hexacosane	14.858	843712	32776.1	25.7
G1	Diesel (TOTAL)		3621174	22285.1	162.5
G2	Diesel (C10-C24)		2323260	22203.1	104.6
G3	Diesel (C10-C28)		3115845	22261.9	140.0

c:\ezchrom\chrom\tf27\tf27.015 -- Channel A



METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

ENVIRONMENTAL
LABORATORY, INC.

```

=====
Client       : SES-TECH                      Date Collected: 06/21/06
Project      : CAMP PENDLETON, UST SITE 14131 Date Received: 06/22/06
Batch No.    : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID    : 10-14131-007                 Date Analyzed: 06/27/06 18:54
Sub Samp ID  : F248-07                      Dilution Factor: .95
Lab File ID  : TF27013A                     Matrix          : WATER
Ext Btch ID  : DSF038W                      % Moisture       : NA
Calib. Ref.  : TF27002A                     Instrument ID    : GCT050
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.095	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	95	65-135

RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

QC SUMMARIES

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

LABORATORY OF A
MEDICAL RESEARCH, INC.

```

=====
Client       : SES-TECH                      Date Collected: NA
Project      : CAMP PENDLETON, UST SITE 14131 Date Received: 06/26/06
Batch No.    : 06F248                       Date Extracted: 06/26/06 13:30
Sample ID    : MBLK1W                       Date Analyzed: 06/27/06 13:14
Lab Samp ID  : DSF038WB                     Dilution Factor: 1
Lab File ID  : TF27005A                     Matrix          : WATER
Ext Btch ID  : DSF038W                      % Moisture       : NA
Calib. Ref.  : TF27002A                     Instrument ID    : GCT050
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.1	.025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	97	65-135

RL : Reporting Limit
Parameter H-C Range
Diesel C10-C24

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

57707A
LABORATORY, INC.

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 3520C/8015B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: DSF038WB DSF038WL DSF038WC
LAB FILE ID: TF27005A TF27006A TF27007A
DATE EXTRACTED: 06/26/0613:30 06/26/0613:30 06/26/0613:30 DATE COLLECTED: NA
DATE ANALYZED: 06/27/0613:14 06/27/0613:56 06/27/0614:39 DATE RECEIVED: 06/26/06
PREP. BATCH: DSF038W DSF038W DSF038W
CALIB. REF: TF27002A TF27002A TF27002A

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	5.53	111	5	5.56	111	0	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Hexacosane	.25	.243	97	.25	.25	100	65-135

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

5174571
LABORATORIES, INC.

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 3520C/8015B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: .98 1.01 1
SAMPLE ID: 10-14131-004
LAB SAMP ID: F248-04 F248-04M F248-04S
LAB FILE ID: TF27010A TF27011A TF27012A
DATE EXTRACTED: 06/26/0613:30 06/26/0613:30 06/26/0613:30 DATE COLLECTED: 06/21/06
DATE ANALYZED: 06/27/0616:46 06/27/0617:29 06/27/0618:11 DATE RECEIVED: 06/22/06
PREP. BATCH: DSF038W DSF038W DSF038W
CALIB. REF: TF27002A TF27002A TF27002A

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX REF. (%)
Diesel	ND	5.05	4.62	91	5	4.55	91	0	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	QC LIMIT (%)
Hexacosane	.253	.238	94	.25	.242	97	65-135

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14131

METHOD 300.0
ANIONS

SDG#: 06F248

CASE NARRATIVE

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
SDG: 06F148

METHOD 300.0 ANIONS

Five (5) water samples were received on 06/22/06 for Nitrate -N and Sulfate analyses by method 300.0 in accordance with "Method for Determination of Inorganic Anions by Ion Chromatography", EPA 600/84-017.

1. Holding Time

Analyses met holding time criteria.

2. Method Blank

Method blanks were free of contamination at the reporting limit.

3. Lab Control Sample/Lab Control Sample Duplicate

Lab control results were within QC limits.

4. Duplicate

Sample F248-04 was analyzed for duplicate. %RPDs were within QC limit.

5. Matrix Spike

Sample F248-04 was spiked. Recoveries were within QC limit.

6. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

Nitrate-N was reported as Nitrogen concentration.

SAMPLE RESULTS

METHOD 300.0
NITRATE-N

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14131
Batch No. : 06F248

Matrix : WATER
Instrument ID : I100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATE/TIME	Extraction DATE/TIME	LFID	CAL REF	PREP BATCH	Collection DATE/TIME	Received DATE/TIME
MBLK1W	ICF044WB	ND	1	NA	.1	.05	06/22/0614:07	NA	AF22-03	AF22-01	ICF044W	NA	NA
LCS1W	ICF044WL	1.88	1	NA	.1	.05	06/22/0614:25	NA	AF22-04	AF22-01	ICF044W	NA	NA
LCD1W	ICF044WC	1.88	1	NA	.1	.05	06/22/0614:42	NA	AF22-05	AF22-01	ICF044W	NA	NA
10-14131-003	F248-03	1.19	1	NA	.1	.05	06/22/0619:05	NA	AF22-19	AF22-13	ICF044W	06/21/06	06/22/06
10-14131-002	F248-02	46.8	20	NA	2	1	06/22/0623:48	NA	AF22-35	AF22-25	ICF044W	06/21/06	06/22/06
10-14131-004	F248-04	8.67	5	NA	.5	.25	06/23/0600:05	NA	AF22-36	AF22-25	ICF044W	06/21/06	06/22/06
10-14131-004DUP	F248-04D	8.66	5	NA	.5	.25	06/23/0600:58	NA	AF22-39	AF22-37	ICF044W	06/21/06	06/22/06
10-14131-004MS	F248-04M	19.2	5	NA	.5	.25	06/23/0601:15	NA	AF22-40	AF22-37	ICF044W	06/21/06	06/22/06
10-14131-005	F248-05	6.9	5	NA	.5	.25	06/23/0601:33	NA	AF22-41	AF22-37	ICF044W	06/21/06	06/22/06
10-14131-006	F248-06	6.8	5	NA	.5	.25	06/23/0602:43	NA	AF22-45	AF22-37	ICF044W	06/21/06	06/22/06

METHOD 300.0
SULFATE

Matrix : WATER
Instrument ID : I100

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14131
Batch No. : 06F248

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATE/TIME	Extraction DATE/TIME	LFD	CAL REF	PREP BATCH	Collection DATE/TIME	Received DATE/TIME
MBLK1W	ICF044WB	ND	1	NA	.5	.25	06/22/0614:07	NA	AF22-03	AF22-01	ICF044W	NA	NA
LCS1W	ICF044WL	4.91	1	NA	.5	.25	06/22/0614:25	NA	AF22-04	AF22-01	ICF044W	NA	NA
LCD1W	ICF044WC	4.91	1	NA	.5	.25	06/22/0614:42	NA	AF22-05	AF22-01	ICF044W	NA	NA
10-14131-004	F248-04	81.2	5	NA	2.5	1.25	06/23/0600:05	NA	AF22-36	AF22-25	ICF044W	06/21/06	06/22/06
10-14131-004DUP	F248-04D	81.1	5	NA	2.5	1.25	06/23/0600:58	NA	AF22-39	AF22-37	ICF044W	06/21/06	06/22/06
10-14131-004MS	F248-04M	106	5	NA	2.5	1.25	06/23/0601:15	NA	AF22-40	AF22-37	ICF044W	06/21/06	06/22/06
MBLK2W	ICF049WB	ND	1	NA	.5	.25	06/26/0621:01	NA	AF26-30	AF26-25	ICF048W	NA	NA
LCS2W	ICF049WL	4.99	1	NA	.5	.25	06/26/0621:18	NA	AF26-31	AF26-25	ICF048W	NA	NA
LCD2W	ICF049WC	4.99	1	NA	.5	.25	06/26/0621:36	NA	AF26-32	AF26-25	ICF048W	NA	NA
10-14131-002	F248-02	1460	100	NA	50	25	06/27/0603:09	NA	AF26-51	AF26-49	ICF048W	06/21/06	06/22/06
10-14131-003	F248-03	131	10	NA	5	2.5	06/27/0603:27	NA	AF26-52	AF26-49	ICF048W	06/21/06	06/22/06
10-14131-005	F248-05	241	20	NA	10	5	06/27/0603:45	NA	AF26-53	AF26-49	ICF048W	06/21/06	06/22/06
10-14131-006	F248-06	240	20	NA	10	5	06/27/0604:02	NA	AF26-54	AF26-49	ICF048W	06/21/06	06/22/06

0004

LABORATORY, INC.

Report date: 6/23/2006 2:58:09 AM
Printed by: Cherry Dam
Ident: AF22-45 F248-06 DF=5
Analysis from: 6/23/2006 2:43:42 AM
File: Q6230243.CHW

EMMA
LABORATORY, INC.

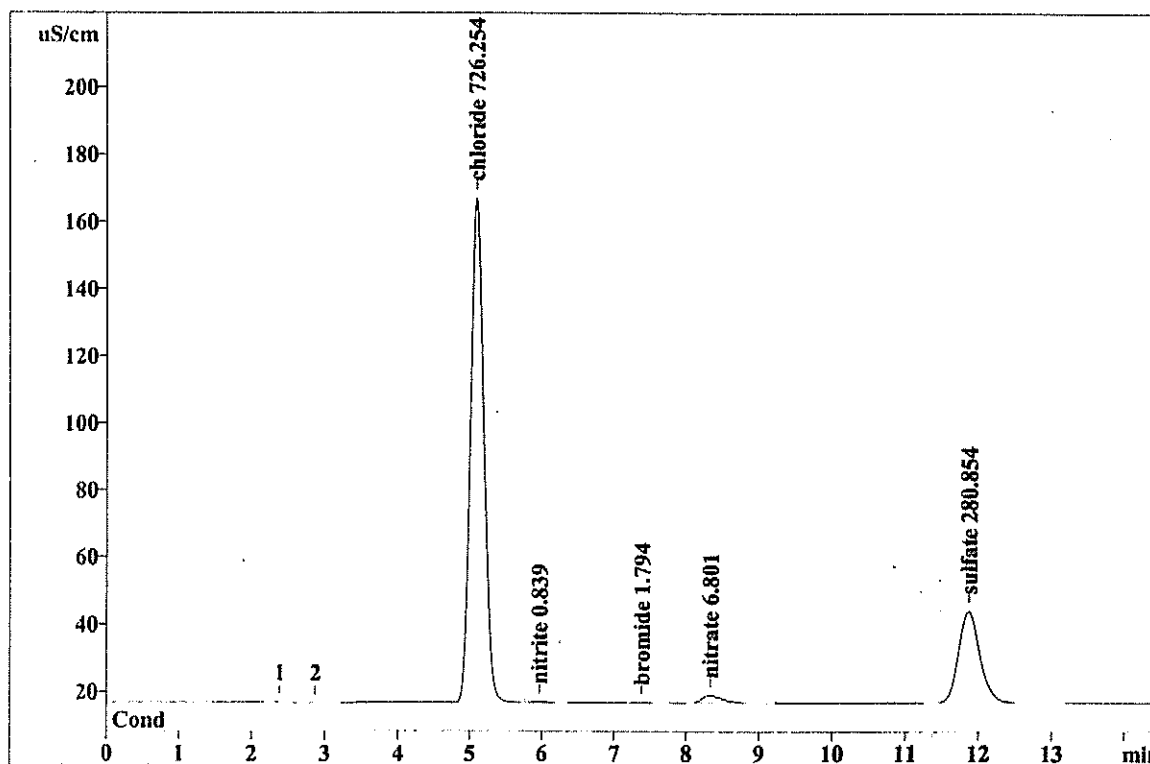
Last save: 6/23/2006 2:58:09 AM

Method: IC100-E08.mtw
Run operator: Cherry Dam
Analysis number: 18579

Last save: 6/22/2006 1:30:14 PM

SAMPLE:

Vial number: 45
Volume: 1.0 µL
Dilution: 5.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height uS/cm	Area uS/cm*sec	Conc. mg/L	Name
1	2.38	0.08	1.072	0.000	
2	2.86	0.06	1.318	0.000	
3	5.07	150.17	1913.454	726.254	chloride
4	5.97	0.24	3.564	0.839	nitrite
5	7.38	0.10	1.616	1.794	bromide
6	8.33	2.20	43.722	6.801	nitrate
7	11.86	27.15	545.112	280.854	sulfate
7	14.50	180.01	2509.859	1016.542	

This report has been created by IC Net
METROHM LTD

8005

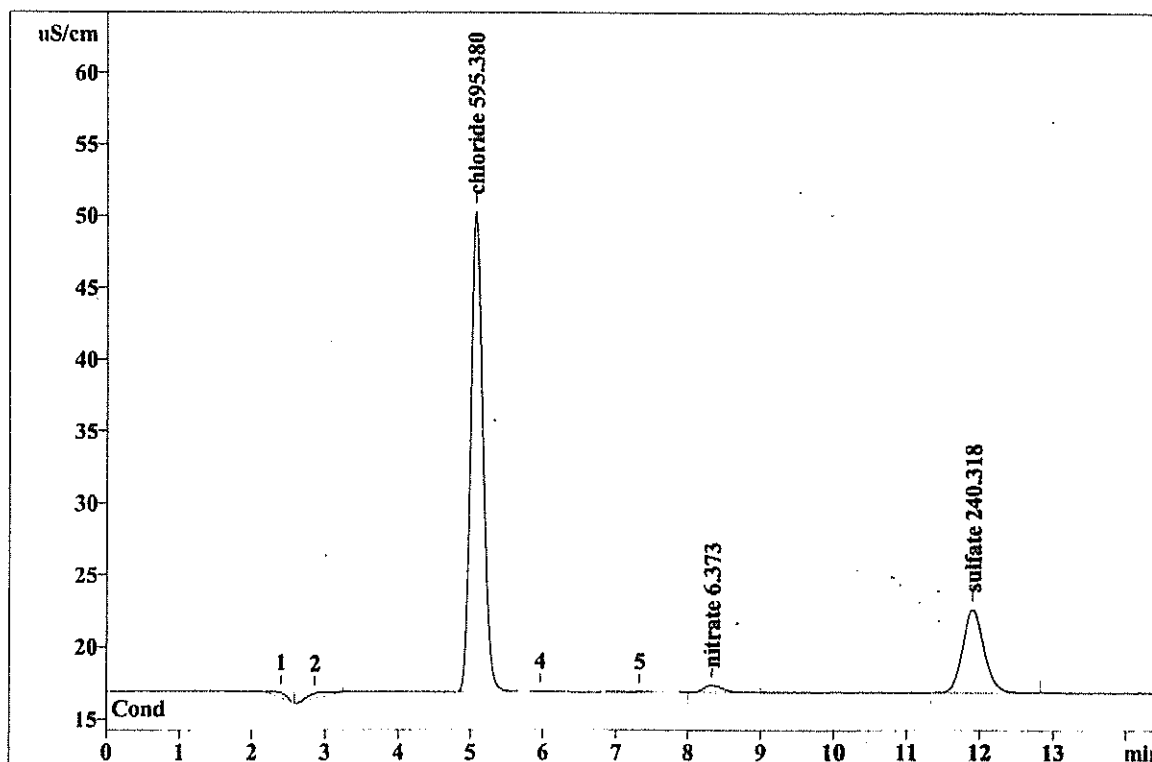
Ident: AF26-54 F248-06 DF=20
 Analysis from: 6/27/2006 4:02:39 AM
 File: q6270402.chw
 Modified!
 Method: IC100-E08.mtw
 Run operator: Cherry Dam
 Analysis number: 18698

Last save: 6/27/2006 4:17:05 AM

Last save: 6/26/2006 12:08:46 P

SAMPLE:

Vial number: 54
 Volume: 1.0 µL
 Dilution: 20.00
 Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height uS/cm	Area uS/cm*sec	Conc. mg/L	Name
1	2.40	0.37	5.226	0.000	
2	2.87	0.37	7.811	0.000	
3	5.06	33.38	391.115	595.380	chloride
4	5.96	0.07	0.951	0.000	
5	7.33	0.05	1.308	0.000	
6	8.32	0.49	9.047	6.373	nitrate
7	11.90	5.78	115.638	240.318	sulfate
7	14.50	40.51	531.096	842.072	

This report has been created by IC Net
 METROHM LTD

QC SUMMARIES

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 300.0

MATRIX: WATER
DILUTION FACTOR: 1
SAMPLE ID: MBLK1W
LAB SAMP ID: ICF044WB
LAB FILE ID: AF22-03
DATE EXTRACTED: NA
DATE ANALYZED: 06/22/0614:07
PREP. BATCH: ICF044W
CALIB. REF: AF22-01

% MOISTURE: NA

DATE COLLECTED: NA
DATE RECEIVED: NA

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Nitrate-N	ND	2	1.88	94	2	1.88	94	0	90-110	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06P248
METHOD: METHOD 300.0
=====

MATRIX: WATER
DILUTION FACTOR: 5
SAMPLE ID: 10-14131-004
LAB SAMP ID: F248-04
LAB FILE ID: AF22-36
DATE EXTRACTED: NA
DATE ANALYZED: 06/23/0600:05
PREP. BATCH: ICF044W
CALIB. REF: AF22-25
% MOISTURE: NA
DATE COLLECTED: 06/21/06
DATE RECEIVED: 06/22/06

ACCESSION:

PARAMETER	SHPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Nitrate-N	8.67	10	19.2	105	80-120

EMAX QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 300.0

MATRIX: WATER
DILUTION FACTOR: 5
SAMPLE ID: 10-14131-004
EMAX SAMP ID: F248-04D
LAB FILE ID: AF22-39
DATE EXTRACTED: NA
DATE ANALYZED: 06/23/0600:05
PREP. BATCH: ICF044W
CALIB. REF: AF22-37

% MOISTURE: NA
DATE COLLECTED: 06/21/06
DATE RECEIVED: 06/22/06

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	DUPL RSLT (mg/L)	RPD RSLT (%)	QC LIMIT (%)
Nitrate-N	8.67	8.66	0	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 300.0

MATRIX: WATER
DILUTION FACTOR: 1
SAMPLE ID: MBLK1W
LAB SAMP ID: ICF044WB
LAB FILE ID: AF22-03
DATE EXTRACTED: NA
DATE ANALYZED: 06/22/0614:07
PREP. BATCH: ICF044W
CALIB. REF: AF22-01

% MOISTURE: NA

DATE COLLECTED: NA
DATE RECEIVED: NA

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	4.91	98	5	4.91	98	0	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 300.0

MATRIX: WATER
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK2W
LAB SAMP ID: ICF049WB ICF049WC
LAB FILE ID: AF26-30 AF26-32
DATE EXTRACTED: NA NA
DATE ANALYZED: 06/26/0621:01 06/26/0621:36
PREP. BATCH: ICF048W ICF048W
CALIB. REF: AF26-25 AF26-25

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	4.99	100	5	4.99	100	0	90-110	20

MS ANALYSIS

CLIENT: SES-TECH

PROJECT: CAMP PENDLETON, UST SITE 14131

BATCH NO.: 06F248

METHOD: 300.0

MATRIX:		WATER					
DILUTION FACTOR:	5						
SAMPLE ID:	10-14131-004						
LAB SAMP ID:	F248-04						
LAB FILE ID:	AF22-36		F248-04M				
			AF22-40				
DATE EXTRACTED:	NA						
DATE ANALYZED:	06/23/0600:05			NA		DATE COLLECTED:	06/21/06
PREP. BATCH:	ICF044W				06/23/0601:15	DATE RECEIVED:	06/22/06
CALIB. REF:	AF22-25				ICF044W		
					AF22-37		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Sulfate	81.2	25	106	101	80-120

2090

5473444
MAGNETIC. 100

EMAX QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14131
BATCH NO.: 06F248
METHOD: METHOD 300.0

MATRIX: WATER
DILUTION FACTOR: 5
SAMPLE ID: 10-14131-004
EMAX SAMP ID: F248-04D
LAB FILE ID: AF22-39
DATE EXTRACTED: NA
DATE ANALYZED: 06/23/0600:05
PREP. BATCH: ICF044W
CALIB. REF: AF22-25

% MOISTURE: NA
DATE COLLECTED: 06/21/06
DATE RECEIVED: 06/22/06

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	DUPL RSLT (mg/L)	RPD RSLT (%)	QC LIMIT (%)
Sulfate	81.2	81.1	0	20